Vol. XII TRANSCRIPT OF RECORD

(Pages 4111 to 4220)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

28.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951
CERTIORARI GRANTED FEBRUARY 4, 1952

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Results of vertain Corrections Made to

Exhibit 64

Introduction

The allocation of Penn Water's cost made by the Commission Staff and testified to by Mr. G. H. Pavis is shown in Exhibit 64.

The effect of the following three corrections to Exhibit 64 was shown by Exhibit 292, consisting of a revised Table VI of Exhibit 64.

- Baltimore Company and the P.R.R.
- 2. Separation of Manor Substation from "Balance of Transmission" and allocation of this substation in the same manner as the 220 kV.
- 3. Recognition of the fact that backfeed received from Baltimore Company increased Penn Water's energy resources and thus increased the amount of energy which was supplied by Penn Water to Baltimore Company.

counsel for the Staff of the ommission supplied photostatic copies of the following revised parts of Exhibit 64: Tables I. II, III, IV, V and V-c. These six revised worksheets are included as part of this report and they are referred to herein as Tables I, II, III, IV, V and V-c.

The results shown in Exhibit 292 also related to changes in Tables V-B and V-d of Exhibit 64 (T-11292-11295 and 11357). These two tables have been revised and are included as part of this report, and they are referred to herein as Tables V-B and V-d.

Purpose of this Report

The purpose of this report is to show the effect of certain corrections made to Exhibit 64 and in the results shown in Exhibit 292. The corrections have been made in several steps; and certain other errors are

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listed, but their correction is not carried out in detail.

In this report parts of the data and of the methods of Exhibit 64 are used, but such use in ro way indicates agreement with those data or methods. The intent is to show, for illustrative purposes only, by the use of 1944 data and the general methods contained in Exhibit 64, the allocation of the overall amount of rate reduction for Penn Water found in Exhibit 64; with corrections herein made limited by the scope of that exhibit.

Summary of Results

The corrections made all reduce the computed excess of the revenue from Baltimore company over the allocated cost to baltimore Company. Starting with Exhibit 292, this excess determined by the Witness Davis was \$1,815,848 or 56.8% of the overall reduction shown in that exhibit. Corrections made in this report bring the excess of revenue over costs allocated to Baltimore company to \$1,080,505 or 39.7% of the assumed overall reduction. Additional errors, if corrected, would further reduce the computed excess of revenue over costs allocated to Baltimore Company.

Transmission Losses, Special Facilities, Conowingo Payment (Revision R-1)

his first group of corrections relates to:

- (a) correction of the amount of transmission losses,
- (b) Correction for cost of special facilities provided by Safe Harbor for use of the P.H.M. in Maryland, and
- (c) Correction in connection with the Comowingo backwater payment.

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Revision of Tables

V-A, V-d, VI and VI-a have been revised. The revised sheets are included as part of this report and have been designated by the addition of R-1 to each table number. Wherever necessary, they are peferred to as Table IV-R-1, V-A-R-1, etc.

In the preparation of these revised sheets another minor revision has been made in the form thereof, but not in the data or results involved. This has been the addition of the \$501,268 (shown in column 6 of Table VI, being there related to the "Energy Supply from Baltimore") as an adjustment to the "Total Cost" for the Pool in line 6, Table IV-R-1 and to the "Total Pool Cost" in column 5 of line 20 of Table V-R-1? This change permits the inclusion of the \$501,268 in the energy costs summarized at the bottom of Table V-R-1. The use of this amount, relating to "Energy Supply from Baltimore", in this particular fashion is not an endorsement of its correctness. The change is made to improve the form of presentation.

The revised Table VI-R-1 involves changes in costs allocated to and revenue received from Baltimore Company. The net result of these changes is a reduction of \$171,895 in the excess of revenue over costs allocated to Baltimore Company.

Transmission Losses

the witness Davis testified (T-12010) that a charge in transmission losses from 23,000 to 18,000 kw. would increase the "Balance available for Baltimore from Holtwood to.", shown in line 29, Table V-A of Exhibit 64, from 10,820 kw. to 13,760 kw.

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Correction in connection with a change in losses from 23,000 kw. to 18,000 kw. has been made beginning with a change in line 10, column 5 of Table V-A-R-1, and continuing in column 1, lines 5 and 6 of Table V-d-R-1 and in column 2, lines 1 to 5 of the same table. The revised figures in Table V-d-R-1 are then used in making changes in line 26, column 3 of Table V-R-1 and in several of the columns of Table VI-R-1.

Safe Harbor's Special Facilities for P.R.R.

In connection with the excess of cost of 25 cycle, single phase service at Safe Harbor, over the cost of 60 cycle 3 phase service, the witness Davis testified (T-11775) "it probably could be said that it is most accurate to segregate this excess cost and assign it proportionately to the railroad service in Pennsylvania and in Paryland on the same basis as the allocation of the Conestoga Substation. If this method were to be followed, it would reduce the pool costs by \$46,900, and increase costs allocated to Baltimore by 39 per cent of this amount, or \$18,291 and increase costs assigned to the railroad for service in Pennsylvania by 61 per cent, or \$28,609."

excess cost of 25 cycle facilities at Safe Harbor. In line 2 of Table
IV-R-1, which line is entitled "Bill for Safe Earbor Power," the ellocation
to the Pol, column 6, is reduced and direct allocations are made to the
P.R.R. (add \$28.609 in col. 4) and to Baltimore [add \$18.291 in col. 5].
The totals in line 6, columns 4, 5 and 6, are correspondingly changed, and
these corrections are carried through Teble V-R-1, beginning with line 19
and Table VI-R-1.

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Conowingo Backwater Payment

The entire amount of \$133,750 paid annually to Penn Water by Susquehanna Electric Company was included in the revenue from Baltimore Company in Table VI of Exhibit 64 and also in Exhibit 292. The inclusion of this amount as revenue from Baltimore Company is incorrect.

The revenue Baltimore Company pays Penn Water is based in part on the amount of net power revenue of Penn Water in the year 1930, with certain adjustments described in Article III(a) of the 1931 Agreement. If the Conowingo backwater agreement had not been made prior to 1930, the amount of net power revenue in that year would have been less and the base figure in the computation of the bill to Baltimore Company would be less. Consequently it is not correct to say that, in the absence of the Conowingo backwater agreement, Baltimore Company would today pay to Penn Water \$133,750 or any other amount in excess of what they actually pay.

By the Conowingo agreement, made in 1926, Fenn Water gave up certain resources that would otherwise have been available for service to all its customers. It receives in return certain annual payments which are a benefit to Penn Water itself. Either Penn Water should retain this benefit for itself or the payment should serve to reduce the cost to all its customers in proportion to their use of the hydro production facilities at Holtwood.

In Table IV-R-1, the Conowingo payment is shown as a credit against the total cost of service to the Pool and in Table V-R-1 as a credit against the Hydro Production Cost. In Table VI-a-R-1 the payment is omitted from the total of "Ravenue shown for Baltimore." The changes carry through to the results shown in Table VI-R-1.

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Allocation of Costs Based on Beltimore Company's Use of Capacity in Excess of Dependable Capacity (Revision R-2)

The next change in Exhibits 64 or 292 that is herein considered is the correction of the allocation of costs, shown in Table V, between capacity and energy costs. Mr. Davis allocated 32.% of the Hydro costs to energy on the basis that 32.% of the installed capacity was capacity in excess of the dependable capacity and that this excess capacity "can be considered as installed for the primary purpose of producing additional energy during periods of high river flow" (T-1190, line 10). This excess capacity and additional energy produced during periods of high river flow is used by Baltimore Company or is sold as interchange, the revenues from which reduce the payments made by Baltimore Company to Penn Water.

This correction of costs to reflect Baltimore Company's use of the 32.5% of installed capacity in excess of dependable capacity requires revision of Tables V. V-d, and VI. The revised sheets are identified by the addition of R-2 to the table numbers. This revision incorporated changes made previously in this report and shown on sheets designated R-1.

The principal change required to make this correction is that the 32.5 of hydro production costs shown in line 24 of Table V-R-2 should be charged directly to Baltimore Company. The 67.5 of the hydro cost, allocated in Exhibit 64 as capacity cost, must be allocated to all the firm customers on the basis of their use of the dependable hydro capacity. Although this use involves both capacity and energy, and although costs should be allocated it accord with both such uses, Mr. Davis has considered this to be a capacity cost. Consequently it is also considered here to be a capacity cost, avoiding for the present the necessity for allocation of a fixed cost between

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capacity and energy.

The variable steam cost and cost of backfeed energy are then the only costs shown in Ethibit 64 that are to be allocated here on the basis of energy.

Since most of the energy that Baltimore Company obtains (376,917,000 kwh. being the revised amount determined by Mr. Davis and shown in Exhibit 292) is not related to its use of the dependable hydro capacity allocated to Baltimore, it is proper to recognize this fact in the allocation of the Holtwood steam cost and the assumed energy cost of backfeed from Baltimore . Company. Such recognition might be given by assuming that the energy directly related to Baltimore Company's use of dependable hydro capacity allocated to it is such as to produce a load factor of about 60%, this being somewhere near the average of the other customers. On this basis Beltimore Company would receive, what might be called for purposes of this computation "firm energy," an amount of about 73,000,000 kwh. (8784 hrs. x 13760 kwl x 60%). This amount of "firm energy" is shown on line 5 of Table M-d-R-2. The total firm energy supply, shown in line 6 of the same table, over which we must spread the steam and backfeed cost is then about \$10,000,000 kwh. The balance of the energy supplied to Baltimore Company, which amounts to 303,917.000 kwh. and which is, for the present, considered to be associated with heltimore's use of the excess capacity, is shown in line 7.

Changes can pow be made at the bottom of Table V-R 2 in the computation of the unit cost for energy. The unit cost for capacity does not change from that computed for Revision R-1.

In Table VI-R-2, the cost to Baltimore Company for the use of

0

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the capacity in excess of dependable capacity, \$781,460, is set forth as a separate item. These services would include considerable capacity that is needed and used by Baltimore Company, energy in the amount of about 303,917,000 kwh., and other electric services. Relating the cost to energy shone results in a rate of 2.6 mills.

'As a matter of fact, however, not all of this 303,917,000 kwh. or even all the other services in excess of those supplied from Baltimore Company's allocated portion of the dependable capacity, are supplied from "capacity in excess of dependable capacity." A large part of the services supplied to Baltimore Company is supplied from the dependable capacity allocated to others. In high flow, a considerable part of the energy for Baltimore (including energy used for interchange) is generated by the dependable capacity allocated to the other customers at times when the loads of these other customers are less than their allocated capacities. At other times this dependable capacity allocated to others is used to provide spinning reserve and reactive caracit for Baltimore Company. The cost of these services is not included in the amount of 2751,460 directly allocated to Baltimore Company. For this reason the results in Table VI-R-2 are illustrative only of a partial correction on the basis of Baltimore Company's use of facilities. They do not provide a proper allocation of cost, even on the assumption that Baltimore Company does use all the "capacity in excess of dependable capacity," for in fact it uses even more services than this capacity can provide

Redefinition of Use of Pool Facilities (Revision R-3)

Hydro plants such as Holtwood and Safe Harbor are built to provide sources of both capacity and energy as well as other services. They are operated today for those purposes. Mr. Spaulding testified that a 50-50

-9-

division of total hydro costs between capacity and energy is reasonable. He also testified that a similar division should be made of the Holtwood steam plant costs and certain transmission plant costs.

An allocation on this basis, without any additional changes, can be made quite simply. The capacity and energy costs at the bottom of Table V-R-1 must be redetermined and corresponding corrections made to VI-R-1. The two revised sheets are designated V-R-3 and VI-R-3. In this revision there are incorporated all the revisions in the R-1 tabulations but none of the revisions in the R-2 tabulations. As compared with Table VI-R-1, Table VI-R-3, shows a reduction in the excess of revenue from Baltimore over the allocated costs amounting to \$229,488.

Corrected Statement of Dependable Capacity (Revision R-4)

The next changes that were made relate to dependable capacity:

(1) correction of the amount of dependable capacity, and (2) correction of the division of dependable capacity between Holtwood and Safe Harbor. The dependable capacity, resulting from the coordinated operation of Areas 5 and 6, available to the combined Area 6 and Penn Water's and Safe Harbor's firm Pennsylvania customer loads for the condition of most adverse flow at the time of the December peak, and with dependence on drawdown for a relatively small part of this capacity, was 292,000 kw. This results from the deduction of 26,000 kw. made available to Area 5, from the 324,000 kw. shown in Schedule 16 of the Penn Water-Safe Harbor Form 12 Report for 1944. The utilities in Area 5 relied on this 26,000 kw. capacity from Area 6 as their share of the benefits from coordinated operation. The witness Watchorn testified that 100,000 kw. of the Holtwood hydro capacity is dependable and is mirelated to the installed or to the dependable capacity at Safe Harbor.

These corrections in dependable capacity require a complete revision of Table V-A-R-1, revision of lines 5 and 6 of V-d-R-1, and change in the unit cost of capacity on Table V-R-3 (without change in the amount of the capacity and energy costs from those computed previously for the 50-50 split of costs shown on Table V-R-3). These revised tables have been designated by the addition of R-4 to the table numbers. As compared with Table VI-R-3, Table VI-R-4 shows a further increase in costs allocated to Baltimore Company amounting to \$333,960.

Up to this point the excess of revenue from Baltimore Company over costs allocated to Baltimore Company has been reduced by about \$925,000. This reduction is shown by comparison of the original Table VI of Exhibit 64 with Table VI-R-4 of this report. The approximate difference of \$925,000 includes the corrections shown by Exhibit 292 as well as those made herein.

Other Errors

There are other corrections that should be made to Exhibit 64, other than those already discussed in this report. Among these other corrections that should be made are some that depend on information not available from Exhibit 64, Exhibit 292, the worksheets supplied by Commission Counsel in connection with Exhibit 249, or the testimony relating to any of these exhibits. The net result of all the following suggestions is probably not more than \$100,000 further reduction in the excess of revenue from Baltimore over costs allocated to Baltimore Company.

The following is not intended to be a complete list of all the corrections that should be made in Exhibit 64.

Table I

Lines 7, 8, 9, 10 (also Manor Substation part of "Belance of

d

· - 11 - -

Transmission") - Allocate all 220 kv. facilities 100% to Baltimore.

Lines 11 and 13 - The Perryville line is used for service to the P.R.R.; but when it becomes necessary to make an allocation of its cost to Baltimore Company, then its use for interchange should be considered a use by Baltimore Company and about 9% of the total cost allocated to that Company.

Line 15 - Part of the cost shown in column 6 should be allocated to Baltimore Company on basis of interchange use being a use by Baltimore Company.

Line 22 - Allocate Lehman Farm Substation, included in "Balance of Cransmission," to P.P.& L.Co..

Line 22 - The entire amount of disallowance in cost of Transmission Plant as shown in Commission Exhibit 51 has been applied against "Balance of Transmission." In Exhibit 51 not all of these disallowances are applied to the several items of property grouped in Line 22.

Lines 24 and 25 - Intangible and general plant should be distributed among the pool and the special facilities for the several customers in proportion to the sums of lines 3 and 23. This principle of allocation of intangible and general plant was stated by Mr. Davis (T-11781) "In practically every case that I have ever seen, intangible and general plant is spread over the classified items on the ratio of the totals of each classified group."

Table II

The changes to be made in Table I require corresponding changes & in all seven lines of Table II.

Table III

The changes in allocation of investment in Table I require cor-

12

responding changes in lines 8, 9, 11, 14 and 15.

Line 17 The Administrative and General Expense should be allocated to all customers as well as to the pool, just as in Table V-c it was allocated among Hydro, Steam, and Transmission facilities. The amount of Administrative and General Expense here used is incorrect and does not contain all expenses shown by the Company's reports. The improper deduction of \$9,703 from this expense is shown in Table III-a.

Table IV

Line 1 - Show the corrected totals from Table III.

Line 2 - The amount shown is not the actual payment by Penn Water to Safe Harbor in 1944.

Line 3 - The tax allocation (details of which were Shown at T.11795) is incorrect. With the data available it is possible and proper to allocate certain taxes between property in Pennsylvania and Maryland.

Table V

The additional corrections to this table are those that result from changes in Tables I, II, III and IV.

Table V-A

Line 1 - Change steam capacity from 26,000 kw. to 28,000 kw.

Lines 16 to 24 - Increase reserve to 15%, but only when dependable capacity is correctly shown as reported in Schedule 16 of FPC Form 12 of Penn Water and Safe Harbor. For the dependable capacity shown in Exhibit 64, no reserve is required.

Line 23 - Show correct P.R.R. load at time of system peak rather than billing demand.

Table V-B

Include daily net backfeed from Baltimore Company and purchased

- 13

Pennsylvania interchange among energy resources of Penn Water. Change cost of backfeed energy from Baltimore Company (wherever it may appear in Table VI or revisions of Tables IV and V) to a cost computed on a daily net basis.

Adjust amount of backfeed downward to represent average flow conditions.

Table 1

Include proper amount of reserve with customers maximum demands; but only when dependable capacity is correctly stated on basis of Penn Water-Safe Harbor Form 12, Schedule 16. Include swing carrying capacity, but only where it is larger than propen reserve.

Use maximum demand of P.R.3. rather than billing demand. Use one hour coatesville peak.

REVISED WORK SHEETS FOR EXHIBIT 249 (or 292)

Tables I

II

IV

V

V-B

V-d

Supplied by Commission Counsel

Corrections based on testimony of Witness Davis

Table I

BOLIWOOD AND SUSQUERANNA AVERAGE PLANT IN SERVICE - 1914; ITEMS ASSIGNED TO DIDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co.	P.E. Co.	Bd. Lt. & Pr. Co.	P.R.R. Co.	Beltimore	Pool	Total Service
1	Plant In Service Production Plant Byure Storm Total Production Plant	·) a	7 2	/• · · · · · · · · · · · · · · · · · · ·			\$15,847,426 4,527,533 \$20,375,019	\$15,047,165 6,527,533 620,375,019
4 5	Transmission Plant Kanor Substation (2/3 Balt., 1/3 Pool) Boltwood - Baltimore Line Bighlandteen Sub-Ostion Baltimore - Composer Line			For comment of the co		114,166 41,371,261 971,877 171,357	57,083	171,249 \$ 1,371,281 971,877 171,357
7 6 9	Safe Harbor - Westport Line (2/3 Balt., 1/3 Pool) Safe Harbor - Riverside Line (2/3 Balt., 1/3 Pool) Washington - Billoott Line (2/3 Balt., 1/3 Pool)		•			1,158,700 1,012,710 210,772 13,590	579, 150 506, 355 105, 365 21, 794	1,737,160 1,519,065 316,157 65,384
11 12 13	Ellicott Switching Station (2/3 Balt., 1/3 Pool) Safe Harber - Perryville Line (AO% P.R.R., 60% Baltimore) Concertoga Substation (61% P.R.R. 39% Baltimore) Perryville Switching Station (40% P.R.R., 60% Raltimore)				719,925 291	663,193 160,280	•	1,105,322 1,180,205 7(.8 393,133
15 16 17	Violet Hill Substation Holtwood - York Line (29% Ed. Lt. Pr. Co.) Holtwood - Contesville Line Newlinville Switching Station		586, 725 9, 959	116,126 126,026	a -11	•	756,192	504,918 586,725 9,959
19 20 21	Boltwood - Lemonster Line Engleside Switching Station Donogel and Donogel Tup Switching Stations Membels and South Akron Switching Stations	17,025 6,635 12,609 3.119					.6	17,025 6,635 12,609 3,110
22	Polance of Transmission Total Transmission Plant	84.78	796,684	6 599.804	1,162,345	6,177,963	1,388,841	1,388,841
24	Intengible Plant General Plant						173,070	173,070
. 26	Total Plant in Service	\$39,418	1996,684	539.844	1,162,345	6,177,963	21,341.896	132,861,150
27	Percent of Total	0.1	1.3	1.7	3.5	18.8	/74.0	100.0

Table II

DEVELOPMENT OF RATE BASE FOR

PACILITIES ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co.	P.E. Co.	Ed. Lt. & Pr. Co.	P.R.P. Co.	Baltimore 5	Pool 6	Total Service
1	Total Plant in Service	\$39,118	\$596,684	\$539,814	1,162,345	6,177,963	24,344,896	\$32,861,150
. 2	Depreciation Reserve	4,375	106,365	136,034	163,095	1,038,386	6,529,863	7,976,118
3	Not Plant in Service	35,043	190,319	LO3,810	999,250	5,139,577	17,815,033	24,883,032
5 6	Working Capital Cash Working Capital Materials and Supplies Total Working Capital	290 200	2,016 5,221 7,210	4,032 4,022 8,965	2,016 10,157 12,173	23,296 54,556 77,852	192,6L0 290,840 483,480	221,000 366,000 590,000
7	Rate Base	835.333	W97,559	102,775	1,011,425	5,217,429	18,298,513	25.1413.032

Table III

HULTWOOD AND SUSQUEHAMEA OPERATING EXPENSE - 1944 TTEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

	Boltwood and Susquehanna	P.P. & L. Co.	P.E. Co.	Ed. Lt. & Pr. Co.	P.R.R. Co.	Baltimore	Pool 6	Total Service	
1	Production Cost Exclusive of Purchased Power	•	•	•	0 0 0	•	\$ 357,980	\$ 357,980	
. 3	Steam - Puel and Water Steam - Boiler Plant & Coal Handling Quip, Mt. Steam - Other Operating and Maintenance						332,035 53,152	53,152	100
5	Total Production Expenses				-		201,310 914,477	201,310 9144,477	1
	Transmission Lanor Substation (2/3 Balt., 1/3 Pool)		*	<i>J</i>		516	258	774	
6	Highlandtown Substation					78,661		78,661	
7	Holtwood - Highlandtown & Baltimore - Gumpowder Lines					17.17.		42,474	
8	Ellieott Switching Station (2/3 Baltimore)	0.				739	36)	2 1,108	
9	Safe Harbor - Westport, Safe Harbor - Riverside, and					10.400	At 110	8° 100	
10	Ellicott - Washington Lines (2/3 Reltimore) Competoga Substation (01% P.R.R. 37 Balt.)				0 0 100	10.633	24,617	9. 71,160	
	Same Barbor - Perryville Line (40% P.R.R., 60% Baltimore				6,477	10,244		17,074	3 74
11 12	Boltwood - Coatesville Line		15,012		6,830	10,244		15,012	e
	Violet Bill Substation		•7,011	30,195				30,195	
13	Boltwood - fork Line (2% Ed. Lt. & Pr. Co.)	4		2,918			6, lole	8,682	
15	Balance of Transmission Expense	768		<u> </u>			73,166	73,954	
16	Total Transmission Expense	, 6 788	\$15,012	632,713	115,307	1186,686	1. 104,000	1 354,506	
17	Administrative and General Expenses	0.00					160,691	160,891	0
18	Total Operating Expense Exclusive of Purchased Power	788	\$15,012	\$32,713	115,307	1186,686	\$1,539,368	0 41,789,874	
19	Percent of Total		0.9	1.6	0.9	10.4	Ub.0	100.0	

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Table IV

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

	•	P.P. & L. Co.	P.E. Co.	Ed. Lt. & Pr. Co.	P.P.P. Co.	Baltimore 5	Pool 6	Total Service	
1	Operating Expense	\$ 788	\$15,012	\$32,713	\$ 15,307	186,686	1,539,368	11,789,874	
2	Bill for Safe Harbor ower				a .		992,535	992,535	
3	Texes	7,696	12,251	9,931	22,088	103,480	381,518	530,904	
4	Depreciation Expense	723	6,518	9,385	19,235	69,526	358,795	161"515	
5	Return 5 Percent	1,766	24,678	20,639	50,571	260,871	914,926	1,273,651	
6	Total Cost	\$10,973	\$58,689	\$77.668	107,201	620,563	4,187,142	\$5.057.230	

Table V

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Produ	otion Pacili	ties		Total
		Bydro	Variable 2		Transmission Facilities	Jointly Used Plant
1 2	Production Plant Transmission System	\$15,8L7,L86		4.527.533	3,017,100	\$20,375,019 3,017,100
34	Percent Total	15,847,486		19.4	3,017,100	23,392,119 100.0 952,777
2	Intengible and General Allocated	645,030		184,839	_ 122,908	
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7 8	Depreciation Reserve	4,383,472		1,489,064 3,223,308	2,482,681	6,529,863 17,815,033 192,6L0
10	Working Capital Materials and Supplies	196,899	-	107,686 56,423	19,264 37,518	290,840
11	Total Working Capital .	262,589		164,109	56,782	483,480
12	Rate Base	112, 371,633		3,387,417	2,539,463	118,298,513
	Total Cost of Service					•
13	Operating Expense excluding Purchased Power	\$ 525.374	\$ 565.344	,\$ 295,561	\$ 153,089	\$ 1,539,368
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025		360,954
16	Retirement and Unemployment and Miso. (Operating Ratio)	7.012	7.547	3.948		20.564
17	Depreciation Expense	197,272		114,390		358,795
18	Return - 9% of Rate Base Purchased Power	618,582	e b	169,371	126,973	914,926
20	Total Pool Cost	992,535 1 2,585,141	\$ 572,891	\$ 653,295	\$ 375,815	8 4,187,142
	Classification to Demand and Energy Components	1	Total	Capacity	Bhergy	
21	Total Bydro Power Cost, 67.5% Capacity	9	2.585.141	1,744,970	\$ 840,171	
22	Variable Steam Costs		572,891	462 205	572,891	
23	Pixed Steam Cost		653, 295	653,295		
थ	Transmission Cost	• .	375,815	375.815		1. 1.
25	Total Costs		4,187,142	\$19.16	1.27 Mille/B	h . `

Table V - c

OPERATING EXPENSE

OPERATION AND MAINTENANCE OF JOINTLY USED FACILITIES

	•	Pro	duct		Trans-	
		Hydro		Variable	mission	Total
				3	•	5
1	Total Hydro	357,980				Ø357,980
2	Fuel and Water			332,035	+	332,035
3	Boiler and Coal					
	Equip. Mt.		•	53.152		53,152
4	Other Steam		201,310	, ,	000	201,310
5	Transmission				104,	104, 000
6	Subtotal	357,980	201,310	385,187	104,000	1,048,477
7	Percent Total	34.1	. 19.2	36.7	10.0	100.0
8	Adminis. and					
	General	167,394	94,251	180,157	49,089	490,891
9	Total	525,374	295,561	565,344	153,089	1,539,368

Revised forksheet for Exhibit 292

Revisions based on testimony of Witness Davis

SYSTEM LOAD DATA NET ENERGY FROM HOLTWOOD PLANT
PLUS ONE-THIRD OF SAFE HARBOR 1944 WITH ADDITION TO ADJUST FOR AN AVERAGE WATER YEAR

		Bydro (1)	Steam Generation (3)	Plus 1/3 5. H.
2 3	Not Generation Holtwood Safe Harbor	512,765,000 772,112,000	171,091,000 171,091,000 1,165,998,	683,856,000 257,381,000 941,237,000
5 6 7	Total Transmission Lose Net delivered Delivery to Firm Loads	1,284,907,000		57,252,300 883,984,706 → 125,317,000
8 9 10 11 12	Pennsylvania RR Co. in Pennsylvania Wholesale Sales to Utility Companies in Penna. 512,18 Total Balance available to Baltimore Co. Not Sales of Baltimore's energy in interchange			1,009,301,700 756,566,756 272,784,944
15 16 17	Total delivered from generating stations - 1944. Additional delivery in average water year Total available in average water year			152,134,444 007,501 1,009,301,700 104,182,056 105,125 1,115,483,756
18 19 20	Total available to Baltimore - 1944 Additional available in average water year Total available to Baltimore average water year			101,182,056 101,182,056 101,182,056 101,182,056 101,182,056 101,182,056

1/	Actual Delivery to Baltimore 1944	152,134,944
-	Actual Received from Beltimore 1944	125,1317,000
		26,817,944
- ,		131,000,000
3	Additional Sales in Average Year over 1914	104, 182, 056

2/ Energy to which Baltimore is entitled but chooses to sell in interchange in Pa.

Company	Purobased	Sold	Net Sales	Net Bill
M. E. Co.	6,133,000	65,156,000	59,323,000	\$296,993
P. E. Co.	21,771,000	10,901,000	19,130,000	91,799
P.P. & L. Co.	11,805,000	53,952,000	12,117,000	210,136
Total	39,709,000	160,309,000	120,500,000	\$628,868

[24296]

Revised Worksheet for Exhibit 292

Revisions based on testimony of Witness Davis

Table V - d

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

	,	P-013-03-0	innuel		in a Year of Average Flow	
	AS.		Percent Total	Kwh 3	Total 4	Factor 5
1 2 3 4 5	P. P. & L. Co. P. E. Co. Ed. Lt. & Pr. Co. P. R. R. in Pa. Baltimore	66,000 24,500 9,560 \$3,900 10,820	45.6 16.9 6.6 23.4 7.5	345,329,221 152,292,000 44,863,535 194,082,000 251,680,880	20-0 13 20-0 13 20-0 17	7 71
5 5	Total Noncoincident Demand Baltimore Total	144,780	100.0	988,186,756 376,917,000 1,113,483,756	100.0 33.9	397 .

REVISIONS RELATING TO TRANSMISSION LOSSES, SPECIAL FACILITIES, AND CONOWINGO PAYMENT

V-A -R-1

VI -a

TABLE IV-R-I

Table IV - R-1

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co.	P.E. Co.	Ed. Lt. & Pr. Co.	P.R.P. Co.	Baltimore 5	Pool 6	Total Service
1	Operating Expense	\$ 788	\$15,012	\$32,713	\$ 15,307	186,686	1,539,368	\$1,789,87L
2	Bill for Safe Harbor Power	B			28,609	18,291	945,635	992,535
3	Texas	7,696	12,251	9,931	22,088	103,480	381,518	530,904
4	Depreciation Expense	723	6,548	9.385	19,235	69,526	358,795	161"515
5	Return 5 Percent	1,766	24,678	20,639	50,571	260,871	914,926	1,273,651
6	Total Cost	£10,973	\$58,689	\$72,668	\$ 135,810	\$ 638,854	4,140,242	\$5,057,236
Add	"Energy Supply from Baltimore" (pe	er cost shown in Col.!	, Table VI, Exh	ibit 64)		0 2 10 2	501,268	*
Ded	luct: Conowingo Backwater Payment						(133,750)	
Bal	ance=Pool Cost Allocated in Tables Y	and VI (R-1, R-2, R-	3 and R-4)		* ** ** ** ** ** ** ** ** ** ** ** ** *		4,507,760	

TABLE Y-R-I

Table V -R-1

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILCHATT AND PER KILCHATT-HOUR

			Produ	otion Pacili		Transmission	Total Jointly Took	۰ (
			Eydro I	Variable	Fixed	Facilities 4	Plant			
	1	Production Plant	\$15,8L7,L86		44.527.533	3,017,100	(20,375,019 3,017,100			
	3	Transmission System Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119			
	4	Percent Total	67.7		19.4	12.9	100.0			
	5	Intengible and General Allocated	645,030		184,839	122,908				
	6	Total Jointly Used Plant in Service	16,492,516	• \	4,712,372	3,140,008	24,344,896			
	7	Deproviation Reserve	4,383,472		1,189,064	657,327	6,529,863		A Salaria	
	8	Not Investment	12,109,044		3,223,308	2,482,681	17,815,033			
	.9	Working Capital	65.690		107,686	19,264	192,640			
	11	Interials and Supplies	196,899		764,109	- 37,518 56,782	290,840			
	12	Total Working Capital Capital	262,589		3,387,417	Mary Control of the State of th	T18,298,513			
			112, 371, 633		3,301,411	2,757,105	.10,2,0,,2			
	0	Total Cost of Service								
	13	Operating Expense excluding Purchased Power	\$ 525.374	\$ 565.3LL	\$ 295,561	\$ 153,089	1,539,368			
0.1	15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954			
	16	Retirement and Unemployment and Miso. (Operating Ratio)	7,012	7,547	3.948	2.057	20,564			
1	17	Depreciation Expense	197,272	*	114,390	47,133	358,795	, 0		191
	18	Peturn - % of Rate Base	. 618,582		- 169,371	126,973	914,926			
	39-	-Perchased Pener -Setal-Peol-Good	- 779,525	E EZ HIT	1 653,295	375,015	-990,535			
		1.5 의 경우 200 전 경우	* 2,707,242	*****	* 0777277		14,107,142	•		
		Energy Supply from Baltimore								
		Variable						1 to 1 \$1.		8
	19	Purchased Power	945,635				945,635			
	20	Energy Supply from Baltimore" 501,268					501,268			
	22	Conowingo Backwater Payment (Credit) Total Pool Coet 501,268	\$ 2,404,491	4 570 001	♦ 653,295	A 377 AVE	(133,750)			
			2,404,491	\$ 572,891	+ 655,255	• 375,815	•4,507,760			
		Classification to Demand and Energy Components		Total	Capacity	Bacrey	Total	Capacity	9 501,268	
7.	4	Energy Supply from Baltimore Total Bydro Power Cost, 67.5% Capacity	-	4.585MI	1;744,970	840,171	2,404,491	1,623,031	781,460	
5	-	Variable Steam Costs		572,891	-31443710	572,091 0	572,891	1,000,000	572,891	-
6 .	23	Pixed Steam Cost		653,295	653,295	715,675	653,293	653,295	-,-,-	
	4	Transmission Cost		- 375,015	375,015		375,815	375,815		
8	3	Total Cost		4,107,142	12,774,000	1,413,062	4,507,760	2,652,141	1,855,619	
,	-	Unit Costs		1	619.16	1.27 M 110/hd		\$17.95/low	1.67 mills/kv	wh.

TABLE Y-A-R-I

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO. - INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

		boood	Safe	Total	Total Fydro and
	Steam (1)	Bydro (2)	Herbor (3)	Hydro (4)	Steem (5)
Installed Capacity Holtwood and Safe Harbor - % of total hydro	26,000 lor	104,000 km 31.14	230,000 kw 68.86	334,000 km	360,000 low
Dependable Capacity on regular weekly cycle of draw and refil! Plus one-half of additional capacity from use of S.H. pondage Total dependable capacity allocated on basis of installed capacity Percent of total Percent of Installed Capacity	26,000 low 10.3 100.0	70,221 5 27.9	155,279 km 61.8	197,000 km 28,500 km 225,500 km 69.7 67.5%	251,500 kw 100.00
Reported station use and trans. loss allocated to dependable capacity	1,854 2,770 km	5,022 km	11,124 11,124 by	16,146 10,046	18,000 kw
Net Dependable Capacity available for load	24,146 km	65,199 km	144, 155	209,354 204,000 km	233,500 kw
Demands of Pa. Customers on System Peak Form 12 - Pool Firm Londs Plus	•			n elen	92,400 km
and P.R.R. P.R.R. Co. in Pa. Dec. billing Total coincident firm demand Balance available for Baltimore from Holtwood and Safe Harbor	` ` `				31,237 km 109,86
Leas Baltimore's two-third share of S.H.				0.	94,049 lm 96,101
			1 11	1-	13.76

TABLE Y-d-R-I

Table V - d -R-1

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALLIMORE IN A YEAR OF AVERAGE RIVER FLOW

	the state of the s	Annual		Holtwood Bne	1.00	·
· ·		Maximum	1	Average	Flow	
		Nw 1-	Percent Total Z	Kwh 3	Percent Total	Load Factor
1	P. P. & L. Co.	66,000	44,646+0	345,329,221	0510 31.0	60
2	P. E. Co.	24,500	16.630-0	152,292,000	16-4 13.7	71
3	Ed. Lt. & Pr. Co.	9,560	6.5 800	44,863,535	4-5 4.0	53
4	P. R. R. in Pa.	33,900	23.096-4	194,082,000	10-8 17.4	- 65
-	-Baltimers	10,000	4-6	961,000,000	25-5	265
+	Total Noncoinsident	144,700		000,100,750	100-0	A
5	Baltimore	13,760	9.3	376,917,000	33.9	311
6	Total •	147,720	100.0	1,113,483,756	100.0	/
			0.5			. /

APPLICATION OF UNIT COSTS TO CUSTOMERS! MEASURED LOADS ASSEMBLY OF CAPACITY, EMERGY AND SPECIAL PACILITY COSTS FOR EACH CUSTOMER COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

7	1	Noncoincident	Energy Sales	Capacity	Energy	Special Facilities	Energy Supply from Charge to Customere		Total	Total Re		Revenue in	
		Demande	Average River Flow		Costs	Cost	at 4 M11.	Baltimore	Coet	Amount	Percent	Amount	Percent
		1	2	3	- 4	- 5	6	7	8	9	10	11	12
2	P. P. & L. Co. P. B. Co.	66,000 21,500	315,329,221 152,292,000	\$1,184,953 439,869	\$ 575,491 253,794	\$ 10,973 58,689	Included	•	\$1,771,417 752,352	42,176,256 986,360	12.9	\$ 404,839 . 234,008	
	Ed. It. & Pr. Co. R. R. Co. in Pa.		194,082,000	608,635	74,765 323,437	72,668	· Col.4		319,072	368,90L	19.1	49,832 387,632	14.2
5	Boltimore Total	13,760	376, 917, 000	\$ 2,652,141	628, 132 1, 855, G19			(501,268) \$(501,268)	84,923,486	2,656,716 7,643,750	100.0	2,720,264	100.0

Note: The totals in Cols. 8 and 9 Esclude an amount of \$135,750 for the Conovingo Backwater Payment.

Exhibit No. 351

00

TABLE XI-a-R-I

Table VI - a-R-I

RECONCILIATION OF REVENUE SHOWN FOR BALTIMORE WITH HOLIWOOD BILL TO BALTIMORE FOR 1944

" Holtwood bill as rendered \$2,027,849

Net interchange sales 628,867

Cenewings backmater payment ___155,750

Total \$2,750,465 \$2,656,716

P

Table V-R-2

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOMATT AND PER KILOMATT-HOUR

1		Produ	otion Pacili			Total			
		Bydro	Variable Variable	Pized	Transmission Facilities	Jointly Used		1.	
		- T	5	7		58			
	Production Plant	£15,847,486		14,527,533	3,017,100	\$20,375,019	8.		
	Transmission System Total Jointly Used Plant Directly Classified	15,847,486		4,527,533		3,017,100			
	Percent Zocal	67.7		19.4	12.9	100.0			
	Intengible and General Allocated	645,030		184,839	122,908		andre .		
	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896			
	Depreciation Reserve	4,383,472		1,489,064	657,327	6.529.863	,		
	Net Investment	12,109,044		3,223,308		17,815,033			
1	Morking Capital	65,690	1 × 10	107,686	19,264 37,518	192,640	1_	- Ass	
1	Materials and Supplies Total Working Capital	196,899		764,109	- 56,782	290,840			
i		112, 371,633		3,387,417	12,539,463	T18,298,513			
	Total Cost of Service		6			• [
1	Operating Expense excluding Purchased Power	\$ 525.374	\$ 565.344	\$ 295,561	\$ 153,089	\$ 1,539,368			
1	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954			
i	Retirement and Unemployment and Miso. (Operating Ratio)	7,012	7.547	3,948	2.057	20,564			
1	Depreciation Expense	197,272		114,390	47,133	358,795		0	
1	Return - 5% of Rate Base	618,582		169,371	126,973	914,926	1.		
3	Total Pool Foot	T -990,535	100.001	Lacinos	T 375,815	14,107,142			
	Energy Supply	· 2, 20, 141		,,,,,,		4,4,1,1,4,6			
	from Battimore Variable								
10	Purchased Power	945,635		•		945,635			
20	"Energy Supply from Baltimore" \$ 501,268					501,268	1		
2	Conowingo Backwater Payment (Credit) Total Pool Cost 501,268	\$ 2,404,491	4 E 70 ABI	\$ CE 2 COE	À	(133,750)			
		2,404,491	572,891	• 653,295	* 375,815	*4,507,760	0.1	Direct to Baltime	
	Classification to Demand and Energy Components		- Total	Copedity	- Brobly		Copacity Energy		
4	Energy Supply from Baltimore Total Bydro Power Cost, 67.5% Capacity, 32.5% to Baltimore		A 505 MI	1,744,970	\$ 840,171	2,404,491	1,623,031	\$ 781,46	
2	Variable Steam Costs		532,091		572,091	572,891	572,891	No. of the last of	
4	Pixed Steam Cost		653,295	653,295		653,295	653,295		
do the			- 375,815	375,019 -2,774,000	2/12,061	€ 375,845 4,507,760	2,652,141 \$1,074,199	\$781 AG	
0	- Unit Costs		4,107,142	\$19.16 P	1.27 Wille/20.		\$17.95/km. 1.33 mill		

TABLE X-d-R-2

Table V - d-R-2

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

	Annual Maximum		Holtwood Bne in a Yea Average		
	Demand Kw	Percent Total	Kwh 3	Percent Total	Load Factor
1 P. P. & L. Co. 2 P. E. Co. 3 Ed. Lt. & Pr. Co. 4 P. R. R. in Pa. 6 Potal Noncoinciden Domand	24,500 9,560	44.6 45.0 16.6 16.0 6.5 6.6 23.0 85.4 7.6	345,329,221 152,292,000 44,863,535 194,082,000 251,600,000	35.0 42.6 15.4 18.8 1.5 5.6 19.0 24.0 29.5	60 • 71 53 65 • 265
5 Baltimore ("Firm") 6 Total ("Firm")	13,760	9.3	73,000,000	9.0	CO
7 Baltimore (additional of not related to use of de capacity shown in line 3	pendable		303,917,000	D	

TABLE VI-R-2

Table VI - R-2

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOALS'
ASSEMBLY OF CAPACITY, EMERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum	Energy Sales in Year of	Capacity	Energy	Special Facilities	Energy Supply from Charge to Customers	Baltimore Credit to	Total	Total Re	venue .	Revenue in		
		Demands	Average River Flow	Costs	Coets	Cost	at 4 M11.	Baltimore	Cost	Amount	Percent 10	Amount	Percent	
	P. P. & L. Co.	66,000 21,500	316,329,221 152,292,000	\$1,184,953 439,869	\$ 458,194 202,066	\$ 10,973 58,689	Included	•	\$1,654,120 700,624	\$2,176,256 986,360	28.5	\$ 522,136 285,736		
3	Rd. It. & Pr. Co. R. R. Co. in Pa.	9,560 33,900	194,082,000	608,635	59,526 257,514	135,810	in Col.4	(50) (6)	303,833	368,904 1,165,514	4.8	453,555	2.4	
6	Baltimore Total	147,720	73,000,000	\$ 2,652,141	\$ 1,074,159	€38,854 916,994		(501,268) \$(501,268)	1,262,950	₹7,643,750		1,393,766 2,720,264		
7	Baltimore		303,917,000*	- 114	781,460	**				to the state of				

Notes; *Additional energy not related to use of dependable capacity allocated to Baltimore ** Cost of capacity in excess of dependable capacity *** Includes cost shown in line 7

The totals in Cols. 8 and 9 exclude an amount of \$133,750 for the Conowingo Backwater Payment.

OF USE OF POOL FACILITIES

(50-50 DIVISION OF FIXED COSTS SETWEEN
CAPACITY AND ENERGY)

Tables V

VI)

TABLE X-R-3

Table V -R-3

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOMATT AND PER KILOMATT-HOUR

		Produ	otion Pacili	48	Transmission	The state of the s		
		Hydro	Variable	Fixed	Facilities 4.	Plant	ā	215
1	Production Plant	\$15.847.486		14,527.533	1	\$20,375,019		
2	Transmission System	15,847,486	-	4.527.533	3,017,100	3,017,100		
L	Total Jointly Used Plant Directly Classified Percent Total	67.7		19.4	12.9	100.0		
5	Intengible and General Allocated	. 645,030		184,839	_ 122,908			0
5	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896		
7	Depressiation Reserve	4,383,472		1,489,064	657,327	6,529,863		
8	Not Investment	12,109,044		-3,223,308	2,482,681	17,815,033	1.1	
9	Working Capital	65.690		107,686	19,264	192,660	1	
0	Materials and Supplies	196,899		764,109	- 37,518 - 56,782	290,840		
2	Total Working Capital Rate Base	262,589 112,371,633		3,387,417	12,539,463	118,298,513		
7.	Total Cost of Service	412, 5/1,055		7,507,427	-,,,,,,,,,		. *	
	The state of the s					4 2 500 0/4		
3	Operating Expense excluding Purchased Power	\$ 525.374	\$ 565.344	\$ 295,561	\$ 153,089	\$ 1,539,368		
Ť	Texes	244,366		70,025	46,563	360,954		
5	Property and Capital Stock and Income (Plant Ratio) Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7.547	3.948	2.057	20,564		4. 1
7	Depreciation Expense	197,272		114,390	47,133	358,795		
8	Return - 5% of Rate Base	618,582		169,371	126,973	914,926		
9	- Northwood Power	- 772,535	-		T 225 016	-999-575		
0	Total Pool Cost	₹ 2,385,141	+ 5/2,000	* 053,295	1-5157445	4,107,142	4.	4.1
	Energy Supply		9		0.00			
	from Baltimore Variable							
,	Purchased Power	945,635				945,635		V* .
0	Energy Supply from Baltimore 501,268		***			501,268	The second	
1	Conowingo Backwater Payment (Credit)	(133,750)			4	(133,750)		0
2	Total Pool Cost 501,268	2,404,491	572,891	653,295	\$ 375,815	4,507,760		
	Classification to Demanu and Energy Components		-Total	Capacity	Passey	Total	Capacity	Ener
+	Energy Supply from Baltimore Total Bydro Power Cost, 67-36 Superity 50-50 allocation	•	· sace	1, 44,970	840,171	2,404,491	1,202,246	1,202,
2	Variable Steam Costs		572,891	27.443770	572,091	572,891	1,202,240	5 572,8
3	Pirad Steam Cost 3	- * IT 10 S	653,275	653,295		653, 295	326,647	326,6
Ť	Transmission Cost J. 50-50 allocation to capacity and energy		375,815	. 375.015	150 .50 .51	4 375,815	187,908	187,9
5	Total Cost		4,107,142	2,774,000	1,413,061	\$4,507,7GO	1,716,801	2,790,9
-	Unit Costs			£19.16	1.27 Halle/Mr.		\$11.62/kw.	2.50m

TABLE VI-R-3

Table VI -R-3

APPLICATION OF UNIT COSTS TO CUSTOMERS! MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Wonocincident Maximum Demands	t Energy Sales in Year of Average River Flow	Capacity Costs	Energy	Special Facilities	Energy Supply from Charge to Customers p at 4 Mill.		Total Cost	Total Rev		Revenue in		
		1	2	3	- Coets	Cost	6	7	8	9	10	11	12	
-	P. P. & L. Co.	60,000	316,329,221	• 767,052		\$ 10,973		1		12,176,256	28.5	\$ 532,660	19.6	
	P. B. Co Bd. Lt. & Pr. Co.	9,560	152,292,000 LH, 863,535	284,739	381,722		Included "		725,150	986,360 368,904	12.9	72,679	9.6	
	R. R. Co. in Pa. Baltimore	33,900	194,082,000 376,917,000	373,985	486,469	135,810		(501,268)	1,016,264	2,656,716	19.1	1,414,465	52.0	
6	Total	13,760	1,113,483,756	\$ 1,716,801	\$ 2,790,959			\$(501,268)	4,923,486	\$7,643,750	100.0	\$ 2,720,264	100.0	

Note: The totals in cols. 2 and 9 exclude an amount of \$133,750 for the Conowingo Backwater Payment:

4147

REVISION BASED ON CORRECTED DEPENDABLE CAPACITIES

TABLE X-R-4

Table V-R-4

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOMATT AND PER KILOMATT-BOUR

		•	Produ	otion Facili		Transmission	Total Jointly Used		
			Fydro	Variable 2	Pixed 3	Facilities 4	Plant 5		6
	1 2	Production Plant Transmission System	\$15,8L7,L86		14.527.533	3,017,100	3,017,100	*	
•	345	Total Jointly Used Plant Directly Classified Percent Total Intangible and General Allocated	15, el.7, læ6 67.7 645,030		4,527,533 19.4 184,839	3,017,100 12.9 122,908	23,392,119 100.0 952,777		
 	6		16,492,516		4,712,372	3,140,008	24,324,696		
	7 8 9 10 11 12	Depreciation Reserve Net Investment Working Capital Haterials and Supplies Total Working Capital Rate Base	4,383,472 12,109,044 65,690 196,899 -62,589 11,371,633		1,489,064 -3,223,308 107,686 -56,423 -164,109 -3,387,417	657,327 -2,482,681 19,264 37,518 -56,782	6,529,863 17,815,033' 192,640 290,840 483,480 T18,298,513	♂	
		Total Cost of Service	1						
	13 14 15 16 17 18 19	Operating Expense excluding Purchased Power Taxes Property and Capital Stock and Income (Plant Ratio) Retirement and Unemployment and Misc. (Operating Ratio) Depreciation Expense Return - 5% of Rate Base Parchased Power Total Fool Cost	244,366 7,012 197,272 618,582 772,525		* 295,561 70,025 3.948 114,390 169,371	46,563	\$1,539,368 360,954 20,564 358,795 914,926 -992,535 14,107,142		
		Energy Supply from Baltimore Variable Purchased Power	945,635		6 3	•	945,635		
	20	Energy Supply from Baltimore" Conowingo Backwater Payment (Credit) Total Pool Cost 501,268	\$ (133,750) \$ 2,404,491	\$ 572,891	653,295	\$ 375,815	\$\frac{501,268}{(133,750)}\$\$ \$\frac{(133,750)}{4,507,760}\$	- 14	
 23 24 25 26 27 28 29	安公司公司	Classification to Demand and Energy Components Energy Supply from Daitmore Total Hydro Power Cost, 67.5% Separatty 50-50 allocation Variable Steam Costs Fixed Steam Cost Transmission Gost Transmission Gost Onit Costs	4	#,585.441 	1,744,970 .651,295 .375,015 .59774,000	\$40,171 572,091 1,413,062 1,27 M1110/Be	Total 501, 268 2,404,491 572,891 653,295 375,815 4,507,760	\$1,202,246 \$1,202,246 \$326,647 \$187,908 \$1,716,801 \$9.12/kw.	Energy 501, 268 1,202, 245 572,891 326,648 187,907 72,790,959 2.50mills/kwh.

Holtwood

Table V-A-R-

Balance available for Baltimore from Holtwood Co.

TABLE V-A-R-4

Total Hydro and

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO. INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

*		Steam (1)	Hydro (29	Herbor (3)	Hydro (4)	Steam (5)
	Installed Capacity Holtwood and Safe Harbor - % of total hydro	26,000 lor	104,000 km.	230,000 kw 66.96	234,000 lar 100.0	360,000 kw
	Dependable Capacity on regular weekly cycle of draw and refill Plus one-half of additional capacity from use of S.H. epondage Total dependable capacity allocated on basis of installed capacity Percent of total Percent of Installed Capacity Reported station use and trans. loss allocated to dependable capacity Net Dependable Capacity available for load	26,000 km 10,3 100,0 3,000 2,370 km 23,000 23,630 km	9,000 6,116 1-	198,000 155,279 km -61.8 7,000 -14,21.2 km 191,000 141,005 km	197,000 as 28,500 km 285,500 km 89.7 67.5% 16,000 20,600 km 282,000 201,800 km	298,000 324,000 251,500 kw 19,000 23,000
	Demands of Pa. Customers on System Peak Form 12 Pool Firm Loads Plus		* 0			
0	P.P. & L. Co. Non Firm Firm 10% Reserve 52,000 km 52,000 km 57,200 km					
٠	P.E. Co. 10,000 km 23,000 km 25,300 km Ed. L. & P. Co. 9,000 km 9,900 km 9,900 km					er e
	Total for Resale 24,000 kw 84,000 kw 92,400 kw)			0	92,400 km
	P.R.R. Co. in Pa. Dec. billing 28,397 by 21,277 km	0			212,600 31, 200	The contract of the contract o
	Balance available for Baltimore from Holtwood and Safe Harbor		a	1	181,400	100,000
	Less Baltimore's two-third share of S.H.	o o			127,300	The KW

TABLE Y-d-R-4

Table V - d-R-4

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum		.Holtwood Bne in a Yea Average	rof		
		Demand	Percent	-	Percent	Losd	
		·Kw	Total	Kwh	Total	Factor	
	0 :	1	2	3	4	-5	
	9		7	- 4			
1	P. P. & L. Co.	66,000	35.1 45.0	345,329,221	85+0 31.0	60	
2.	P. E. Co.	24,500	13.0 10.0	152, 292,000	15-4 13.7	71	
3	Ed. Lt. & Pr. Co.	9,560	5.1 6-6	44,863,535	-1-5 4.0	53	
4	P. R. R. in Pa.	33,900	18.0 25-4	194,082,000	10-6 17.4	65	
+	- Daltimore .	16,000	A THE	261,600,000	- 26+5	265	
-	Total lienceinsident	-	0)		0		
	Domed	144,780	100-0	080,166,756	100.0		
5	Baltimore	54, 100	28.8	376,917,000	33.9	79	
G	Total	188,060	100.0	1,113,483,756	100.0		

TABLE VI-R-4

Table VI -R-4

APPLICATION OF UNIT COSTS TO CUSTOMERS! MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL PACTITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident	Energy Sales	Capacity	Energy	. Special Facilities	Energy Supply from Charge to Customere	Baltimore Credit to	Total	Total Ren	renue	Revenue in	
		Demands 1	Average River Flow		Coets	Cost	at 4 M11.	Baltimore 7	Cost	Amount 9	Percent 10		Percent 12
	P. P. & L. Co. P. B. Co.	66,000	316,329,221 152,292,000	8 602,515 223,661	6 865,571 381,722		Included	• ,.	\$1,479,059 664,072	986,360	28.5 12.9	\$ 697,197 . 322,288	25.6
1	R. R. Co. in Pa.	33,900	194,082,000	87,273 309,473	112,451 486,469		Col.4	(EA) 2(0)	272,392	368,904 1,165,514	4.8	96,512 523,762	19.3
6	Paltimore Total	188,060	1,113,483,766	\$ 1,716,801	\$ 2,790,959			(501,268) \$(501,268)	\$ 4,923,486			€ 1,080,505 2,720,264	

Note: The totals in cols. 8 and 9 exclude an amount of \$133,750 for the Conowingo Backwater Payment.

60,000.00

\$16,867.20

313,998.75

\$18,351.00

DEMAND, ENERGY AND SPECIAL FACILITY CHARGES INCLUDED IN REVENUE RECEIVED FROM PENNSYLVANIA FIRM CUSTOMERS FOR YEARS 1944 TO 1946, INCL.

→ 10	Pennsylvan	ia Power & Light Comp	any	
	Total Revenue Received	Charges for Energy	Charges for Special Facilities	
1944	\$2,176,255.95	\$2,174,835.03	\$1,420.92	. 6
1945	2,064,927.35	2,063,506.43	1,420.92	
1946	1,958,355.65	1,956,934.73	1,420.92	
, , , , , , , , , , , , , , , , , , ,	. Philadelphia Electr	ic Company (Coatesvil	le Division)	
	Total Revenue Received	Charges for Energy	Charges of for Demand	Charges for Special Facilities
1944	\$ 986,360.03	\$ 617,138.78	\$309,221.25	\$60,000.00
1945	939,107.73	564,898.98	314,208.75	60,000.00

Edison Light and Power Company (York)

\$308,042.66

948,860.95

\$657,123.11

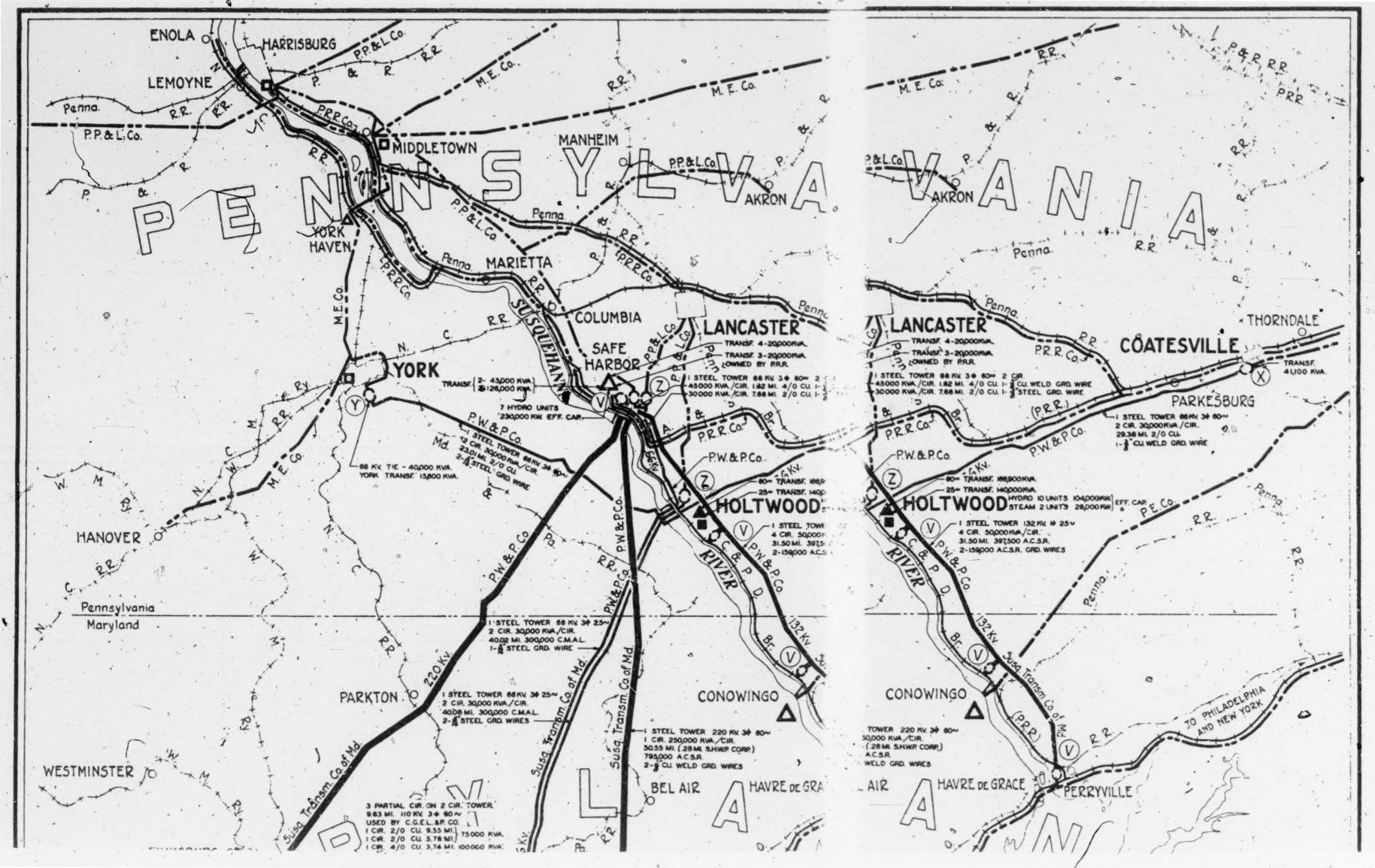
6	Total Revenue Received	Charges for Energy	Charges for Demand	Charges for Special Facilities
1944	\$ 368,904.43	\$ 254,178.91	\$114,000.00	725.52
1945	397,325.85	273,420.41	123,640.00	265.44
	Metropoli	tan Edison Company		L
•	Total Reve- Charge nue Received for Ene		Charges for Spinning Capacity	Charges for Special Facilities

\$327,500.00

574,862.20

1946

1946



Kilowatthours Supplied to and Revenues Received from Pennsylvania Firm Customers (Excluding Pennsylvania Railroad) during Hours of Net Baltimore Backfeed and during Hours of No Net Backfeed

٠	Year	Total Firm Kilowatthours Supplied to Pa.Customers(a)	Kilowatthours Supplied during Hours of Baltim Backfeed	g % of Total F		Kilowatthours Supplied during rs of No Baltimore Backfeed	% of Total Firm Kilowatthours Supplied
-	194	542,485,000	180,675,000	33-3		361,810,000	66.7
*	1945	517,585,000	35,763,000	6.9		481,822,000	93.1
0	1946	532,804,000	115,962,000	21.8		416,842,000 .	78.2
r		1		۵			
٩						Total Rev. Rec'd.	
		Total Firm Rev. Rec'd. for Electric Services	Revenue Received for	for Energy only during Hours of	% of Total Firm	Electric Service Exclusive of Rev Rec'd. for Energ	. Total
	Year	from Pa.Customers(b)	Energy	Baltimore Backfeed	Received	Only during Hours Baltimore Backfe	
	1944	\$ 3,531,520	\$ 3,046,153	\$ 1,014,523	28.7	\$ 2,516,997	.71.3
	1945	3,401,361	2,901,826	200,504	5.9	3,200,857	94.1
	1946	3,564,340	2,839\$840	618,076	17.3	2,946,264	82.7

⁽a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company, Philadelphia Electric Company and Edison Light and Power Company in 1944 and 1945, and to the first two companies, in 1946.

⁽b) Includes revenues received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

Kilowatthours of Net Baltimore Backfeed Used in Connection with Electric Services Supplied to Pennsylvania Firm Customers (Excluding Pennsylvania Railroad)

	~	Dollars (b) Received for Amounts of Energy shown	Gol. (1) in % of Total Firm Kilowatthours Supplied to	Col. (2) in % of Total Firm Revenues Received from
Year	Kilowatthours(a)	in Col. (1)	Pa. Customers (3)	Pa. Customers
1944	59,622,000	\$ 334,791	11.0	9.5
1945	10,037,000	56,272	1.9	1.7
1946	29,384,000	156,617	5.5	4.4

- (a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company, Philadelphia Electric Company and Edison Light and Power Company in 1944 and 1945, and to the first two companies in 1946.
- (b) Dollars based on average energy rates billed, and includes dollars received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

Interchange Supplied to Pennsylvania Customers during
Hours of Net Baltimore Backfeed and during Hours of
No Net Backfeed

	Year	Total Interchange Kilowatthours Supplied to Pa. Customers (a)	Kilowatthours Supplied during Hours of Baltimore Backfeed	% of Total Interchange Kilowatthours Supplied	Kilowatthours Supplied during Hours of No Baltimore Backfeed	% of Total Interchange Kilowatthours Supplied
	1944	154,896,000	9,384,000	6.1	.145,512,000	93.9
p	1945	198,175,000	2,687,000	- 1.4	195,488,000	98.6
	1946	198,003,000	35,828,000	17.7	162,975,000	82.3
34	d					
	Year	Total Interchange Revenue Rec'd. for Electric Services from Pa. Customers (b)	Revenue Received for Interchange during Hours of Baltinore Backfeed	% of Total Interchange Revenue Received	Revenue Received for Interchange during Hours of No Baltimore Backfeed	% of Total Interchange Revenue Received
	1944	\$ 609,412	\$ 49,266 ₀	6.1	\$ 760,146	93.9
	1945	873,312	9,761	1.1	963,531	98.9
ъ	1946	1,182,194	200,710	17.0	981,484	83.0

⁽a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company.

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⁽b) Includes revenue received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

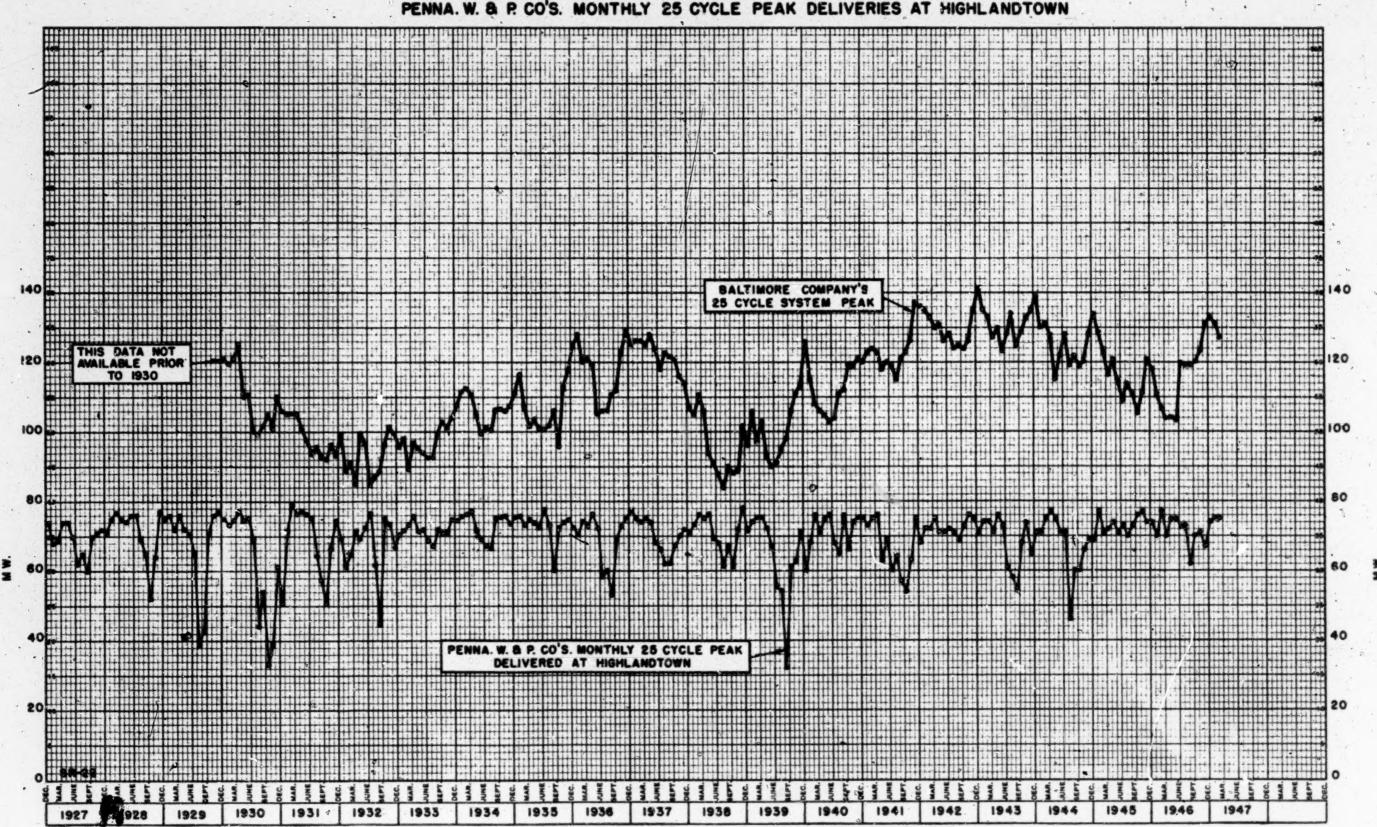
Kilowatthours of Net Baltimore Backfeed Used in Connection with the Supply of Interchange Services to Pennsylvania Customers

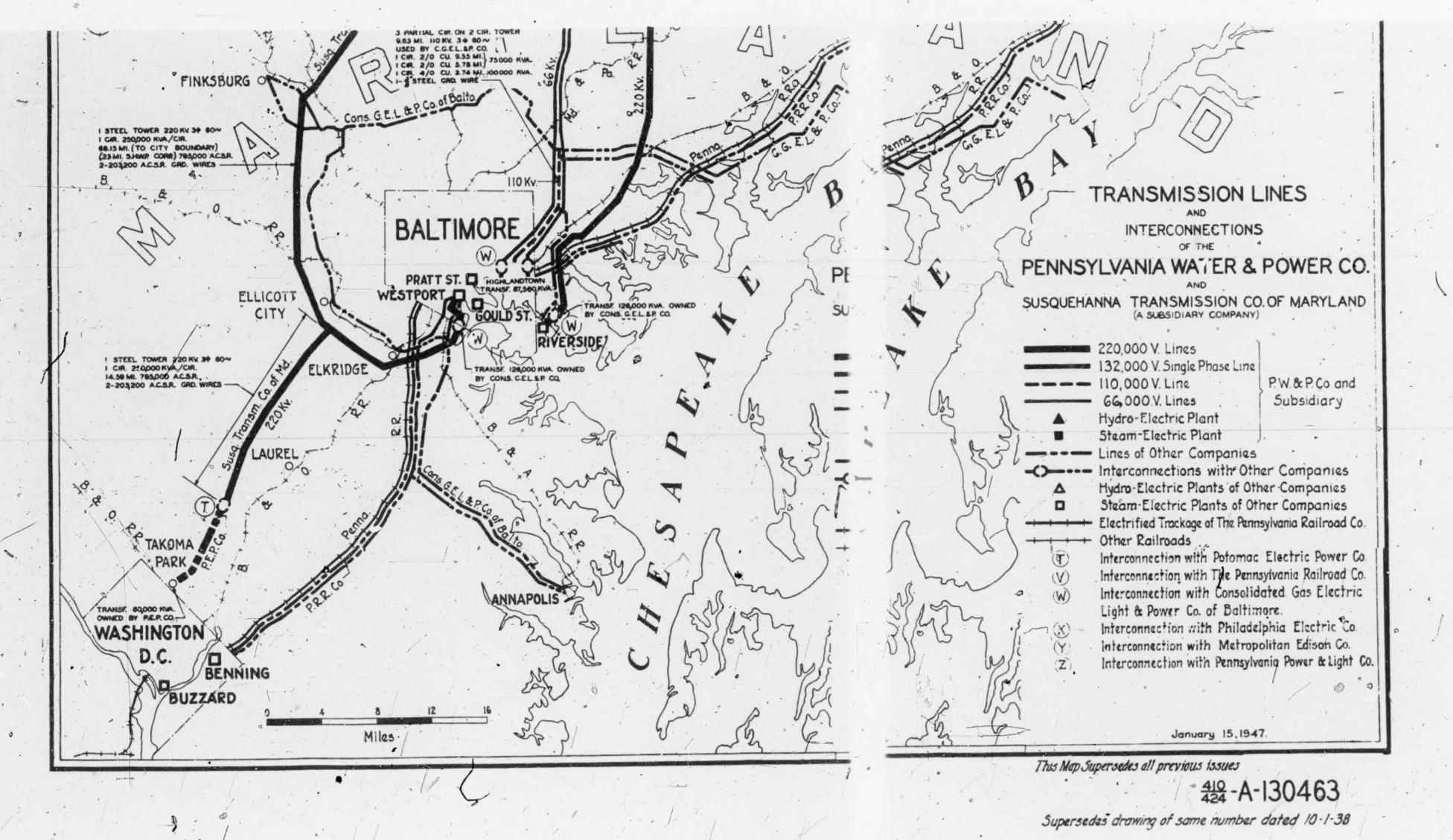
	•	Dollars (b) Received for	Col. 1 in % of Total Interchange	of Total Interchange
Year	Kilowatthours(a) (1)	Amounts of Energy shown in Col. (1) (2)	Supplied to Penna. Cust. (3)	Revenues Rec'd. from Penna. Cust. (4)
1944	6,638,000	\$ 34,850	4.3	4.3
1945	2,116,000	7,702	1,1	0.9
1946 :	23,019,000	131,899	11.6	11.2

- (a) Includes killowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company.
- (b) Includes dollars received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

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BALTIMORE COMPANY'S MONTHLY 25 CYCLE SYSTEM PEAK AND PENNA. W. & P. CO'S. MONTHLY 25 CYCLE PEAK DELIVERIES AT HIGHLANDTOWN





UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Commissioners:

Clyde L. Seavey, Acting Chairman; Claude L. Draper,

Basil Manly. John W. Scott, not participating.

June 30, 1939

In the matter

Safe Harbor Water Power Corporation

ORDER ALLOWING SUPPLEMENTAL RATE SCHEDULE TO TAKE EFFECT PRIOR TO DATE OF FILING

It appearing to the Commission that:

- On April 12, 1939, the Safe Harbor Water Power Corporation filed with the Federal Power Commission its supplemental agreement, dated December 13, 1938, to its agreement of August 1, 1933, the said agreement of August 1, 1933, being designated in the files of the Commission as Safe Harbor Water Power Corporation Rate Schedule FPC No. ., with the Pennsylvania Water & Power Company and the Philadelphia Electric Company, said supplemental agreement providing, among other things, for an extension for a period of three . years from March 31, 1939, of the term of the said Safe Harbor Water Power Corporation Rate Schedule FPC No. 4 whereby said Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company sell electric power and energy to said Philadelphia Electric Company, also making certain changes in the provisions relating to emergency and interchange service and the territory to be served by Fhiladelphia Electric Company with energy so purchased, as set forth in said supplemental agreement;
- (b) By the terms of said supplemental agreement it is to take effect as of April 1, 1939;
 - (c) Good cause has been shown for, and the public interest will be served by, allowing the supplemental agreement of December 13, 1938, to Safe Harbor Water Fower Corporation Rate Schedula FPC No. 4 to take effect as of April 1, 1939;

Safe Herbor Water Power Corporation (Cont'd)

6/30/39.

The Commission orders that:

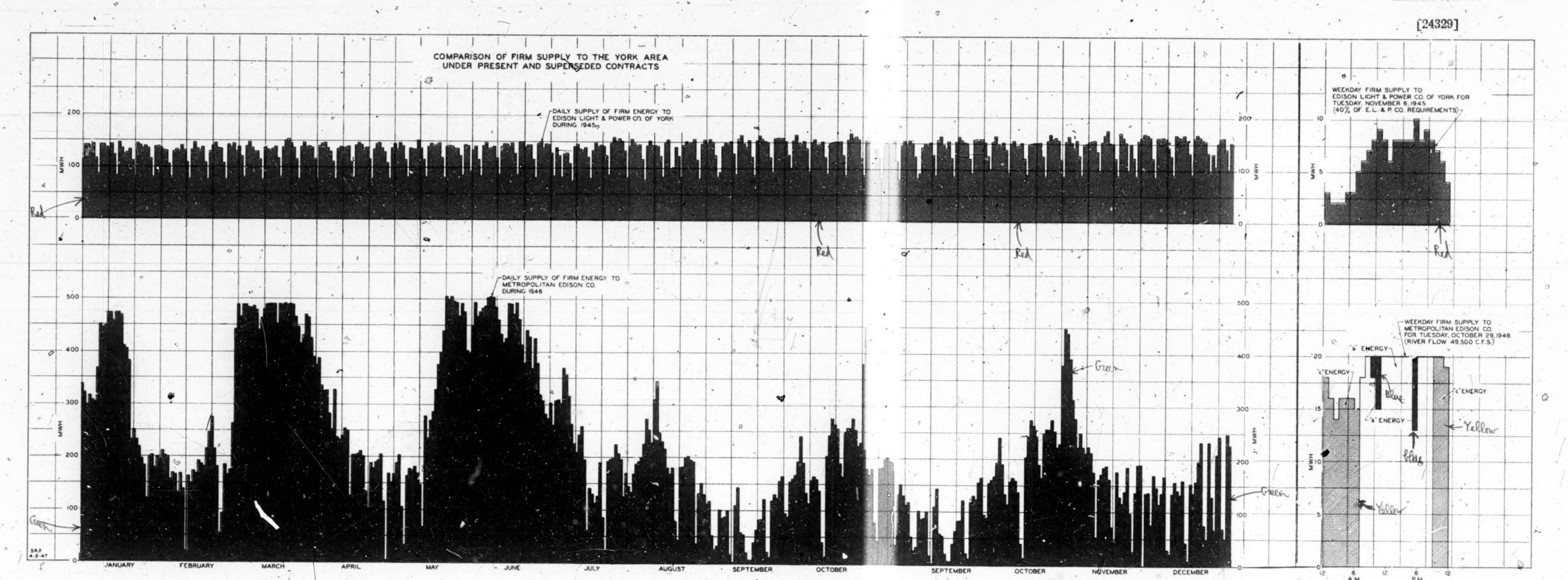
- (A) The rate schedule contained in said supplemental agreement of December 13, 1938, to Safe Harbor Water Power Corporation Rate Schedule FPC No. 4, between the Safe Harbor Water Power Corporation, Pennsylvania Water & Power Company and Philadelphia Electric Company, as filed with the Commission on April 12, 1939, be and it is hereby allowed to take effect as of April 1, 1939;
- (B) Said rate schedule contained in said supplemental agreement shall be deemed to have been filed and published in compliance with the Federal Power Acc.

By the Commission.

(Seal)

(signed) Leon M. Fuquey

Leon M. Fuquay, Secretary.



UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Commissioners)
Leland Olds, John W. Scott.

September 22, 1939

In the Latter of

Project No. 1025

Safe Harbor Water Power Corporation)

ORDER AUTHORIZING INSTALLATION OF ADDITIONAL GENERATING UNIT

- Upon application filed September 22, 1939, by Safe Harbor Water Power Corporation, licensee for Project No. 1025, Pennsylvania, for approval by the Commission of the installation of an additional generating unit in the Safe Harbor project on the Susquehanna River, and it appearing to the Commission that:
 - (a) There are at present six generating units installed in the project with a rated capacity of 42,500 horsepower or 28,000 kilowatts each and penstock and foundation openings have been provided for the installation of the proposed additional unit;
 - (b) The additional generating unit proposed will occupy plant position No. 1 and provide 25 cycle single phase energy to supply the Pennsylvania Railroad which purchases electric energy from the licensee for the operation of its trains;

Upon consideration of the application and record of the project, the Commission finds that:

Installation of the additional generating unit proposed is desirable in the public interest to supply the future needs of the market served by the licensee;

It is ordered that:

Approval is hereby given for the installation of said additional generating unit; provided, the licensee file within fifteen days of the date of receipt of this order, in accordance with the Rules of Practice and Regulations of the Commission, a supplemental Exhibit M showing the location and design of the unit as proposed.

By the Commission.

(Signed)

LEON M. FUQUAY.
Leon M. Fuquay,
Secretary.

BILL NUMBER (2128)-D-216-23856-7-31 Depr. Accounting Ledger. Baltimore, Md. December 17, 1931 Folia. 22288 Name Penna. Water and Power Co. My. J. L. Rintoul, Treasurer, 5051 -16th floor - Lexington Bldg., Balto., Md. TO CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, 28. LEXINGTON and LIBERTY STREETS OLDEN CREDIT To charge you with an amount of \$8,383.16 representing electric energy supplied you during the month of November 1931. \$8,383.16 2,021,500 K.W.H. @ .41474 per K.W.H. The cost of steam generated energy supplied you during the month of November 1931 is based on our Westport Produc-tion Cost for that month. (.3770¢ per K.W.H. plus 10% (.0377¢ per K.W.H.) or a total of (.4147¢ per K.W.H.), This is in accordance with agreement between your Mr. R. L. Thomas and our Mr. F. E. Ricketts)

(c.v.m.)

R.L. Thomas for P.W.& P.Co. and

S.H. Water Pwr. Corp.

January 13, 1932 HOLTWOOD COMPANY'S BILL TO BALTIMORE. COMPANY FOR DECEMBER, 1931 The reference letters used below correspondend to the paragraph letters under Article III of the Supplemental Agreement of June 1, 1931. NET POWER REVENUE OF HOLTWOOD COMPANY? 1. 1930 Rev. Adjusted to Avg. River Flow \$2,832,259.75 2. Decr. in Rev. from Cust.other than Balto. 70,080.06 3. 1931 Net Power Revenue \$2,762,179.69 (b) PAYMENTS ON NET ADDITIONS @ 10.25% 13,365.15 (c) EXPENSES: 1. *Operating Expenses excl. Power Purchased \$ 563,282.24 2. Maintenance 361,639.46 3. General Expense 244,677.21 4. General Taxes 139,237.55 5. Federal Inc. Tax(excl.inc.tax on non-opr.rev.)229,172.84 6. Normal Tax 6,375.00 7. Renewals and Replacements 355,146.73 Total 8. \$1,899,531.03 *Power Purchased shown in item (d) (d) HOLTWOOD CO'S PAYMENTS FOR POWER PURCHASED: 1. Paid to Metropolitan Edison Co. . 37.25 2. Paid to Balto. Co. for back-feed (excl'g. 14,452.47 \$475.85 paid in Ja ... for Dec. 1930) 3. Total 14,489.72 \$4,689,565.59 SUM OF (a), (b), (c) and (d) HOLTWOOD CO.'S REV. FROM PARTIES OTHER THAN BALTO 1. P.P.& L.Co., Lancaster \$1,060,213.53 Chester Valley Elec. Co., Coatesville
 Edison Lt. & Pwr. Co., York 345,381.46 288,710.98 4. Arundel Corp. Safe Harbor 5. Pioneer Elec. Light Co. 36,464.00 6,291.000 6. Metropolitan Edison Co. 20.00 7. Conowingo Backwater Payment 131,166.67 8. Safe Harbor Water Pr.Corp. for Filling Pond 14,406.00 9. Rentals received from Power Devel. Property 10. Total \$1,911,467.75 BALANCE \$2,778,097.84 5,282.72 (f) INT. ON INCREASE IN RES. FOR RENEWALS AND REPLACEMENTS (g) NET DEBIT OR CREDIT UNDER PARAGRAPH (g) NONE NET BILL FOR YEAR 1931 \$2,772,815.12 GROSS AMT. BILLED FOR FIRST 11 MONTHS (without deduc. for \$14,452.47 back-feed steam) \$2,611,614.88 161,200.24 NET BALANCE DUE FOR DECEMBER OPERATING COMMITTEE: (Signed) F. E. Ricketts R. L. Thomas (Signed)

F.E.Ricketts for ton. Gas Elec.

Lt. & Pwr. Company

RLT/MCF

SR-14

Exhibit No. 369

Annual Backfeed Energy Supplied by Baltimore Company

Year	Kwh. Received on Hourly Net Basis	Kwh. Received on Daily Net Basis	Baltimore Co. Average Monthly Production Cost Plus 10% (Mills/kwh.)	Baltimore Co. Bill to Penn Water under Article 6 of 1927 Contract
1944	125,840,000	81,147,000	4.42	\$ 358,641
1945*	24,681,000	1,704,000	4.87	8,291
1946	99,439,000	48,277,000	5.10	246,112

24333]

Wm. Schmidt, Jr. Chairman of the Board and President

COCTY

Charles P. Crange Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md. April Twenty-eighth 1 9 4 7

Mr. J. A. Walls, President Pennsylvania Water and Power Company Lexington Building Baltimore 3, Maryland

Dear Mr. Walls:

Mr. Spaulding gave to us today the attached draft of a letter to Mr. Harry Ferguson, Operating Manager of the Pannsylvania Power and Light Company, proposing terms for the "Extension and Modification of Lancaster Power Supply Contract." Mr. Greer has advised Mr. Spaulding that the terms of this letter are unacceptable to this Company.

In my letter to you of January 24, 1947 the following statement was made with respect to this power contract:

"This Agreement will terminate on October 31, 1948, and the eighteen months' notice to that effect should be given the Pennsylvania Power and Light Company by your Company, as provided in the Agreement. In our letter of April 26, 1945 to your Company regarding the then proposed renewal of the Lancaster power supply contract, we said:

'It is our belief that the rates now charged to Pennsylvania Power and Light Company are too low and that it would be reasonable to increase the rates, particularly because the contract does not contain a fuel rate adjustment clause.

We still hold to this belief. However, in view of the fact that your Company's rates are now being investigated by the regulatory authorities and the uncertainty and difficulty of carrying on contract negotiations under these conditions, we would be willing to approve a renewal Agreement for one year from October 31, 1948, provided such renewal Agreement shall contain a limitation on the load supplied by Holtwood Company."

The time for giving the notice to the Pennsylvania Power and Light Company expires on April 30, 1947 and we must insist that this notice be given by your com-

CONSOLIDATED GAS ELECTRIC LICHT AND POWER COMPANY OF BALTIMORE

Sheet No. 2 To Mr. J.A. Walls, President Date April 28, 1947

pany and the Safe Harbor Water Power Corporation.

The suggested extension of the agreement for a period of one year with a limitation on the load supplied by your company should afford ample time in which to negotiate a new agreement for the Lancaster load.

If the year extension is not made and your company should fail to give the 18 months' notice to the Pennsylvania Power and Light Company, as Mr. Spaulding indicated might be the case, we shall be under the necessity of holding your company liable for all damages which this Company sustains in consequence thereof.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr. President Wm. Schmidt, Jr.
Chairman of the Board
and President

COPY

Charles P. Crane Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Baltimore-3, Md.

February 28, 1947.

Mr. G. W. Spaulding
Member of Operating Committee
Pennsylvania Water & Power Co.
Lexington Building
Baltimore-3, Maryland

Dear Mr. Spaulding:

Referring to our telephone conversation regarding the operation under your Pennsylvania Power and Light Co, contract, I discussed this matter with Mr. Brunner and he advised me in a recent letter, copy of which was sent to you, that Lancaster is operating under Option "A" on a 100% basis, which, as he reports, does not make available the maximum income that could be derived from the P.P.&L. agreement.

During our telephone conversation you advised that although you realized that present operation on the 100% basis would not obtain the maximum dollar advantage to as, nevertheless you intend to continue to operate on a 100% basis unless an emergency develops.

I herewith advise that this position is not satisfactory to our Company and that we are therefore requesting that steps be taken as promptly as possible to obtain the full advantage of the P.P.&L. contract, or, in other words, supply only 80% of the Lancaster load as firm energy whenever it is economical to so operate.

Your cooperation in this matter will be appreciated.

Very truly yours,

(Sgd.) R. T. Greer

R. T. Greer Member of Operating Committee Wm. Schmidt, Jr. Chairman of the Board and President

COPY

Charles P. Cran Executive Vice-P

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY - OF BALTIMORE

Baltimore-3, Md.

February 28, 1947.

Mr. J. A. Walls, Fresident, Pennsylvania Water & Power Company, Lexington Building, Baltimorg - 3, Maryland.

Dear Mr. Walls:

: de

lir. Greer has shown to me the copy of the letter from Mr. Rankin, Chief Engineer of the Metropolitan Edison Company to Mr. Von Eiff, of your Company, dated Rebruary 21, 1947, and Mr. Von Eiff's reply of February 25, 1947, in which he states that your Company will increase the firm power to be supplied to the Metropolitan Edison Company from 23 mw. to 24 mw. effective March 1, 1947.

I desire to repeat what I said in my letter to you of February 18, 1947, regarding this matter, namely, that such increase would have a definite effect on this Company's "steam line" and we therefore are unwilling to approve this proposed increase. Nothing contained in your letter to me of February 20th changes our views in this respect.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

Jas.L.Rintoul, Exec.Vice-Pres. G.W.Spaulding, Vice-President

COPY

J.U.Diehl, Treasurer Wm.H.Eichhorn, Jr. Secretary

J.A. Walls, President

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMCRE 3, MARYLAND

February 20, 1947

Mr. Wm. Schmidt, Jr., President
Consolidated Gas Electric Light and Power Company
Lexington Building
Baltimore-3, Maryland

Dear Mr. Schmidt:

This will acknowledge your letter of February 18th in which you advise that it would not be proper for the Company to assume any additional firm power obligations to the Metropolitan Edison Company under its power contract of November 15, 1945, in connection with our available option to increase such amount of firm power from 23 Mw. to 24 Mw.

The exercise by us of the option to increase this supply to Metropolitan Edison Company on January 14, July 11, and September 14, 1946, was made only after our Operating Committee had very properly considered the matter, but no formal request for approval by your Company appeared necessary in that connection.

In addition to the reasons given by our Mr. Spaulding in his letter of February 11th, in supporting our intentions for further increasing this supply to Metropolitan Edison by 1,000 Kw., we had recognized that the operating reserves of the companies in Area 6 may be found inadequate should we experience a coincidence of minimum river flow with maximum system requirements and the outage of steam capacity. However, the coordinated scheduling of maintenance and operations of the systems in F.P.C. Area 6 and those in F.P.C. Area 5 minimize such probability. Further, the effect on the system "steam line" from such further increase in Metropolitan Edison's supply would appear to be of the order of 250 Kw. which if true, I believe your will agree with me, is negligible on the combined interconnected systems, especially if it be your current intention to remove from your Westport plant a steam generating unit with an effective rating of 5,000 Kw., but which could readily be increased to 10,000 Kw.

We are not convinced that your concern for adequate system reserves has been based upon sufficient appraisal of the situation

Mr. Wm. Schmidt, Jr., President February 20, 1947

to warrant us in not exercising this Company's option under the M.E. contract to increase the amount of firm power in the light of the adventages and benefits both to this Company and to yours and, incidentally, to M.E.

·Yours very truly,

(Sgd.) J.A. Walls President



Wm. Schmidt, Jr. Chairman of the Board and President

COPY

Charles P. Crane Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 18, 1947.

Mr. J. A. Walls, President Pennsylvania Water & Power Company, Lexington Building, Baltimore - 3, Maryland.

Dear Mr. Walls:

Mr. Creer has brought to my attention Mr. Spaulding's letter to him of February 11, regarding a proposed increase in the amount of firm power supplied the Metropolitan Edison Company under the contract of November 15, 1945.

We approved increases in the supply to that Company from 20 to 21 mw on January 14, 1946; from 21 to 22 mw on July 11, 1946; and from 22 to 23 mw on September 14, 1946, pursuant to Article IV of the 1931 Supplemental Agreement between our companies. While we appreciate the reasons Mr. Spaulding assigns in support of his opinion that a further increase of 1,000 kw should be made, we desire to point out that this Company is now short in capacity and the proposed increase would have a definite effect on this Company's "steam line." In times of minimum river flow and system peak load requirements it would be impossible to supply this additional 1,000 kw to Metropolitan Edison Company with adequate reserve and, therefore, it would not be proper to assume this obligation.

In my letter to you of January 24, 1947, regarding the Lancaster and Coatesville power contracts, the statement was made that a limitation should be placed on the load supplied Pennsylvania Power and Light Company and Philadelphia Electric Company. Such a limitation should also be placed on the Metropolitan Edison Company's load and we, therefore, find it necessary to disapprove the proposed increase of 1,000 km.

Your cooperation in handling this matter with the Metropolitan Edison Company will be appreciated.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

Charles M. Cohn Chairman of the Board Wm. Schmidt, Jr. President Charles P. Crane Executive Vice-Pres.

COPY

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 14, 1947.

Mr. G. W. Spaulding
Member of Operating Committee
Pennsylvania Water & Power Company
Lexington Building
Baltimore-3, Maryland

Requested Waiver of 18 Months' Notice Period on Change of Option under the Pennsylvania Power and Light Company Contract.

Dear Mr. Spaulding:

Paragraph (9), entitled "Flexibility Provisions," of the Letter-Agreement dated April 28, 1939 between your Company and the Pennsylvania Power and Light Company gives the Pennsylvania Power and Light Company certain options with respect to the power supply. By letters dated February 8, 1944, February 23, 1945 and February 19, 1946 it was agreed that Pennsylvania Power and Light Company would change from Option "C" to Option "A" on February 15, 1947. On Tues day, February 11, 1947 you advised me by telephone that Pennsylvania Power and Light Company desired to postpone the effective date of this change to February 15, 1948.

This is to confirm my conversation with you in which I advised that Baltimore Company could not agree to such postponement and must insist upon the contractual requirement of at least 18 months' written notice to change from Option "A" to Option "C". You will recall that Mr. Schmidt, in a letter of January 24, 1947 to Mr. Walls, made the statement that a limitation should be placed on the load supplied to Pennsylvania Power and Light Company and Philadelphia Electric Company. My position in this matter is in furtherance of this policy stated by Mr. Schmidt.

Very truly yours,

(Sgd.) R. T. Greer

R. T. Greer Member of Operating Committee COPY

Jas.L. Rintoul, Exec. Vice-President
W. Spaulding, Vice-President

J.A. Walls, President

J.U. Diehl, Treasurer Wm. H. Eichhorn, Jr., Secretary

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMORE 3, MD.

February 11, 1947

Mr. R. T. Greer, Member of Creating Committee, Consolidated Gas Electric Light and Power Company. Baltimore-3, Maryland

Dear Mr. Greer:

Confirming my advice to you a few days ago, the "total requirements" of Metropolitan Edison Company, on February 4, 1947; were 317 Mw. Under the provisions of Article IV, Section 1(b)2 of Penn Water's power supply contract with that Company dated November 15, 1945, Penn Water has the election to increase the "amount of firm power" to be supplied thereunder from 23 Mw. 20 24 Mw.

It is Penn Water's considered opinion that it should elect to increase the "amount of firm power" in accordance with the terms of the contract for the following reasons:

- (a) Such increase will provide a greater utification of the hydro resources of Penn Water and Safe Harbor;
- (b) Such an increase in the firm power obligation of Penn Water will have a negligible effect on Baltimore Company's "steam line";
- pany by the exercise of such option by Penn Water; and
- (d) Penn Water believes that is is in accord with the intent of Article VIII of the Supplemental Agreement between our two companies to exercise this option.

It is the intention of Penn Water to exercise its option to increase the "amount of firm power" to be supplied under its Metropolitan Edison Contract to 24 Mw. and wishes to advise Baltimere Company in advance of such action.

Yours very truly,

(Sgd.) G. W. Spaulding Member, Operating Committee

Charles M. Cohn Chairman of the Board

COPY

Charles P. Crane
Executive Vice-President

Wm. Schmidt, Jr.
President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Baltimore-3, Md. January Twenty-fourth 1 9 4 7

Mr. J. A. Walls, President, Pennsylvania Water & Power Company, Lexington Building, Baltimore-3, Maryland.

Dear Mr. Walls:

Referring to our correspondence regarding the Lancaster Power Supply Agreement with the Pennsylvania Power and Light Company and the Coatesville Power Supply Agreement with the Philadelphia Electric Company, our views are as follows:

1. Lancaster Power Agreement

This Agreement will terminate on October 31, 1948, and the eighteen months' notice to that effect should be given the Pennsylvania Power and Light Company by your Company, as provided in the Agreement. In our letter of April 26, 1945 to your Company regarding the then proposed renewal of the Lancaster power supply contract, we said:

"It is our belief that the rates now charged to Pennsylvania Bower and Light Company are too low and that it would be reasonable to increase the rates, particularly because the contract does not contain a fuel rate adjust ment clause."

We still hold to this belief. However, in view of the fact that your Company's rates are now being investigated by the regulatory authorities and the uncertainty and difficulty of carrying on contract negotiations under these conditions, we would be willing to approve a renewal Agreement for one year from October 31, 1948, provided such renewal Agreement shall contain a limitation on the load supplied by Holtwood Company. We will also approve the construction of the Manor Substation.



- 2 -

Mr. J. A. Walls

January 24, 1947

2. Coatesville Power Agreement

This Agreement will terminate on March 31, 1948, pursuant to the notice contained in the letter of Mr. N. E. Funk, Vice President of the Philadelphia Electric Company, dated September 26, 1946.

Although we feel that the present rates are now too low, we are willing to approve a renewal Agreement for one year from March 31, 1948, with the following modifications:

- (a) That the load supplied from the Downington Substation be transferred to the main surply of the Philadelphia Electric Company and the load area supplied from the Newlin ville Substation be enlarged to include the load to the south of the present Coatesville area, as proposed by the Philadelphia Electric Company.
- (b) That a limitation be placed on the load to be supplied by Holtwood Company under this renewal Agreement.

Yours very truly,

(Sgd.) Wn. Schmidt, Jr.

President

Charles M. Cohn Chairman of the Board COPY

Wm. Schmidt, Jr.
President

Charles P. Crane Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Baltimore -3, Md. November 29, 1946

Mr. J. A. Walls, President, Pennsylvania Water & Power Company, Lexington Building, Baltimore-3, Maryland.

Dear Mr. Walls:

Receipt is acknowledged of your letter of November 26th regarding the Manor Substation.

In view of the fact that it will be necessary before long to give consideration to your Company's power supply to the Pennsylvania Power and Light Company, inasmuch as the power contract with that Company will expire on October 31, 1948, we think it is desirable that the Operating Committee make an engineering study of the need for this installation and that pending the completion of such study no commitments be made as to the construction of the substation and related transmission line.

We believe that the operation of the present system and equipment has been satisfactory and there is therefore no need for any immediate steps toward providing for this installation, especially as with presently quoted deliveries of equipment and materials the substation could not be completed before the expiration of the power contract.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr. A

President

Jas.L.Rintoul, Exec. Vice-President G.W.Spaulding, Vice-President COPY

J.U.Diehl, Treasurer Wm.H. Eichhorn, Jr. Secretary

J.A. Walls, President

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMORE 3, MD.

November 26, 1946

Mr. Wm. Schmidt, Jr., President, Consolidated Gas Elec. Light and Power Company, Baltimore, Maryland

Re: Installation of 66 Kv. Manor Substation at Safe Harbor, Pennsylvania

Dear Mr. Schmidt:

Water & Power Company, Safe Harbor Water Power Corporation and Pennsylvania Power & Light Company, provided that Generating Companies would construct operate and maintain an enlarged 66 Kv. switching station at Safe Harbor together with an additional double dircuit steel tower transmission line from Manor Substation to Lehman Farm Switching Station, not later than May 1, 1943. By letter agreement the construction of this substation was subsequently deferred, subject to the changing requirements or needs of either party. During the war years, certain temporary changes and additions were made to accommodate the increased load requirements of Pennsylvania Power & Light Company in its Lancaster area. With the continuing growth of this customer's load, Pennsylvania Power & Light Company has recently brought to our attention its need for Manor Substation, and it is our judgment that reliability of service to this customer warrants its early completion.

With the changes and enlargement of the existing of Ky switching facilities at manor Substation at Safe Harbor, there will also be provided the contemplated construction of a double circuit steel tower transmission line from Manor Substation to Lehman Farm, and certain neces sary and related changes at Lehman Farm and Holtwood. In connection with this Manor Substation, Safe Harbor will provide certain additional control equipment connecting the substation with its control room.

The cost for completing the above facilities, other than the necessary investment by Safe Harbor Company, has been estimated to be \$550,000. There will be a net charge to retirement reserve of \$20,000 and a net increase in fixed capital of \$530,000.

The facilities to be provided by Safe Harbor Company are estimated to cost about \$37,000 in connection with which there will be a net charge to retirement reserve of that company of about \$3,000 and a net increase in fixed capital of \$34,000.

2.

Mr. Wm. Schmidt, Jr. November 26, 1974

The present estimates of Power and of Safe Harbor Company are necessarily subject to modification in the light of unsettled quotations on equipment and uncertain labor costs for construction.

Generating Companies' commitment for this investment was recognized at the time your Company approved the execution of this Letter Agreement of April 28, 1939, being specifically referred to in an Operating Committee memorandum dated June 1, 1939 relating thereto. While the approval of your Company at this time, of the investment necessary for these extensions, may not be required under the provisions of Article V of the Supplemental Agreement dated June 1, 1931, we wish to advise you at this time of our in tentions to proceed, particularly in the light of the increased costs of construction.

We are hoping to place orders for the more critical equipment before the end of this year.

Yours very truly,

(Sgd.) J. A. Walls President COPY

Charles M. Cohn Chairman of the Board

Wm. Schmidt, Jr.

Charles P. Crane Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Beltimore-3, Md.

November 1, 1946

Mr. John A. Walls, President, Pennsylvania Water & Power Company, Lexington Building, Baltimore-3, Maryland.

Dear Mr. Walls:

On October 8, 1946 Mr. G. W. Spaulding, Vice-President of your Company, at our request furnished us with a copy of the letter of Mr. N. E. Funk, Vice-President of the Philadelphia Electric Company, dated September 26, 1946, addressed to Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation, giving notice of a desire to terminate on March 31, 1948 the Coatesville power supply agreement dated August 1, 1933 and the supplements thereto, unless certain changes and modifications, necessitated by conditions in the area supplied, can be made in the agreement.

In Mr. Spaulding's reply letter, dated September 30, 1946, he states:

"We will be pleased to discuss the changes and modifications to these agreements which you may have in mind at an early date. I believe I may be in Philadelphia within the next two weeks and will try to arrange a talk with you and Mr. Irwin on that occasion if it is convenient."

In order that there may be no misunderstanding as to our position in this matter, we desire to confirm the request transmitted orally to Mr. Spaulding by Mr. Greer, our member of the Operating Committee, on October 11, viz., that representatives of your Company have no further discussion with representatives of the Philadelphia Electric Company regarding any changes to, or extension or renewal of, the existing contract, which will terminate on March 31, 1948, or the making of a new contract, before receiving further advice from Consolidated Company.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President.

ACTUAL CAPACITY AVAILABLE FROM SAFE HARBOR-HOLTWOOD POWER DEVELOPMENTS AT TIME OF ANNUAL PEAKS - KW.

.P.C. Area 6 Annual System Peak (Incl. Penna. Firm Cust.)	1944		1945	" 1946	
Time	Dec.11-6	p.m.	Dec., 5-6 p.m.	Dec.19-6	p.m.
Capacity available from Safe Harbor and Holtwood Power Developments	321,000		364,000 kw.	355,000	
Holtwood Riaro	98,000			102,000	kw.
Holtwood Steam	28,000		28,000 kw.	23,000	
Safe Harbor Hydro	195,000		234,000 kw.	225,000	kw.
afe Hambor - Holtwood Power Developments System Peak			44		
				0	
Time	Apr.19-8	a.m.	May 2-5 p.m.	May 25-1	p.m.
Capacity available from Safe Harbor and Holtwood Power Developments	370,000		371,000 kw.	368,000	
Holtwood Hydro	105,000	kw.	109,000 kw.	109,000	kw.
Holtwood Steam	28,000	kw.	28,000 kw.	26,000	
Safe Harbor Hydro	237,000	kw.	234,000° kw.	233,000	kw.
oltwood Power Development Peak					*
Time	Apr.14-1	e.m.	Apr.28-3 p.m.	May 22-5	n.m.
Capacity available from Holtwood Power Development	137,000		138,000 kw.	137.000	
Holtwood Hydro	109,000		110 000 kw.	110,000	alana w
Holtwood Steam	28,000		28,000 kw.	27.000	
afe Harbor Pomer Development Peak					
Time	May 15-5		Mar.30-11 p.m.	Tune 0:7	
Safe Harbor Hydro (Max. 1-hr. output)	239,000		230,000 kw.	238,000	
Sale marcor mydro (max. 1-mr. odcpac)	237,000	Aw.	230,000 kw.	4.50,000	Aw.
*No. 2 Unit (31,000 kw.) was out for maintenance. (There was					

*No. 2 Unit (31,000 kw.) was out for maintenance. (There was sufficient spare capacity available to permit this maintenance in December).

FIRM	H	OWER	1	DEML	AN:	S	OF I	E.	.SYL	VAN	A	CUSTO	MERS
	10	ON	P	MINE	W	TE	R-S	AFE	HAR	BOR	S	STEM	
		A	T	TIM	Œ	OF	AND	NUA	PE	AKS	1000	KW.	

F.P.C. Area 6 Annual System Peak	1944	1945	1946
Time " Penna.Power & Light'Co. Philadelphia Electric Co. Edison Light & Power Co.	Dec.11-6 p.m. 52,000 23,000 9,000	Dec. 5-6 p.m. 52,000 24,000 10,000	Dec.19-6 p.m. 55,000 27,000
Metropolitan Edison Co. Pennsylvania Railroad (Total Demand on "Electric Companies") Pennsylvania Railroad (Requirements in Pennsylvania) Pennsylvania Railroad (Requirements in Maryland)	52,000	58,000 25,000 33,000	21,000 65,000 24,000 41,000
Safe Harbor-Holtwood Power Developments System Peak			
Time Penna Power & Light Co. Philadelphia Electric Cc. Edison Light & Power Co. Metropolitan Edison Co. Pennsylvania Ráilroad (Total Demand on "Electric Companies") Pennsylvania Railroad (Requirements in Pennsylvania) Pennsylvania Railroad (Requirements in Maryland)	Apr.19-8 a.m. 49,000 16,000 6,000	May 2-5 p.m. 49,000 18,000 7,000 55,000	May 25-1 p.m. 26,000 11,000 22,000 (8,000 3,000 5,000
Holtwood Power Development Peak	-1		The Control of the Control
Time Penna Power & Light Co. Philadelphia Ele tric Co. Edison Light & Power Co. Metropolitan Edison Co. Pennsylvania Railroad (Total Demand on "Electric Companies") Pennsylvania Railroad (Requirements in Pennsylvania) Pennsylvania Railroad (Requirements in Maryland)	Apr.14-1 a.m. 28,000 18,000 3,000	Apr. 28-3 p.m. 42,000 17,000 4,000 50,000	may 22-5 p.m. 36,000 19,000 21,000 58,000 23,000 35,000

		Non-Coinci	dent Max	imum Demand	ls of l	ennsyl vu	nia Firm Custom	ers .
		1944			1945		1946	
		Date	Kw.	Date	8	Kw	Date	Kw .
Penna Power & Light Co.	T.	ov. 21-10 a.m.	64.000	Apr 25-11	a.m.	67,000	Sept. 24-10 a.m	67,000
Philadelphia Electric Co.		Jan. 21-11 a.m.	25,000	Jan. 12-10	a.m.	25,000	Dec. 49- 6 p.m	. 27,000
Edison Light & Power Co.		une19-12Noon		Qct. 2-11				
Metropolitan Edison Co.			5				Des. 20, 6 p.m	23,000
Penna RR (Total Damand on "E Penna RR (Requirements in Pe	lec.Cos.") . I	Peb.29- 7 p.m.	81,000	Dec.10 9	р.п.	82,000	Feb. 13- 7, p.m	. 81,000 45,000
Rema.RR (Requirements in Md	.)	*					Apr. 19- 6.p.m	
*Not measured		1						

J. A.WALLS, PRESIDENT

LAS.L.RINTOUL, ENEC. VICE-PRESIDENT

J.U.DIEHL, TREASURER
WM H EICHHORN, JR. SECRETARY

Sennsylvania Water V. Power Company Sexington Building Baltimore 1. Md.

May 28, 1946

Mr. R. T. Greer,
Member - Operating Committee,
Consolidated Gas Electric Light and Power Company
Beltimore-3, Maryland

Dear Mr. Greer:

Please find enclosed the data prepared by this Company for Schedules 2 and 16 of F.P.C. Form 12 for the year 1945. The attached schedules and accompanying notes are being filed by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation in their power system report to the Federal Power Commission, and the same data are applicable to the combined system report for Penn Water. Safe Harbor Baltimore, Washington and Bethlehem Steel companies, being compiled by your Company from data submitted by the several operating companies.

Yours very truly,

(s) G. W. Spaulding

G. W. Spaulding Member - Operating Committee

GWS: F

COPE

rles M. Cohn

Wm. Schmidt, Jr. President Charles P. Crane Executive Vice-President

CONSOLIDATED CAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3. Md.. .

June 3, 1946

Mr. G. W. Spaulding Member, Operating Committee Pennsylvania Water & Power Co. Lexington Building Baltimore-1, Maryland

Dear Mr. Spaulding:

Attached are copies of Schedules 2 and 16 of F.P.C. Form 12 which we have prepared for the pool report for the year 1945.

You will note that we are following the same method of stating hydro capacity as was used in the pool report for the several previous years. We have, however, included notes (last paragraph in notes to Schedule 2 and note lab to Schedule 16) which indicate that your Company desires to estate the dependable hydro capacities on a different basis and that your Company in its report is submitting different figures.

Very truly yours,

(s) R. T. Greer

R. T. Greer Memher, Operating Committee J. A. WALLS, PRESIDENT

JAS.L.RINTOUL, EXEC. VICE-PRESIDENT

J.U. DIEHL, TREASURER
WM.H.EICHHORN, JR. SECHETARY

Pennsylvania Water V. Power Company Lexington Building Baltimore 1, Mil.

June 5, 1946

Mr. R. T. Greer,

Member - Operating Committee,
Consolidated Gas Electric Light and Power Company
Baltimore-3, Maryland

Dear Mr. Greer: -

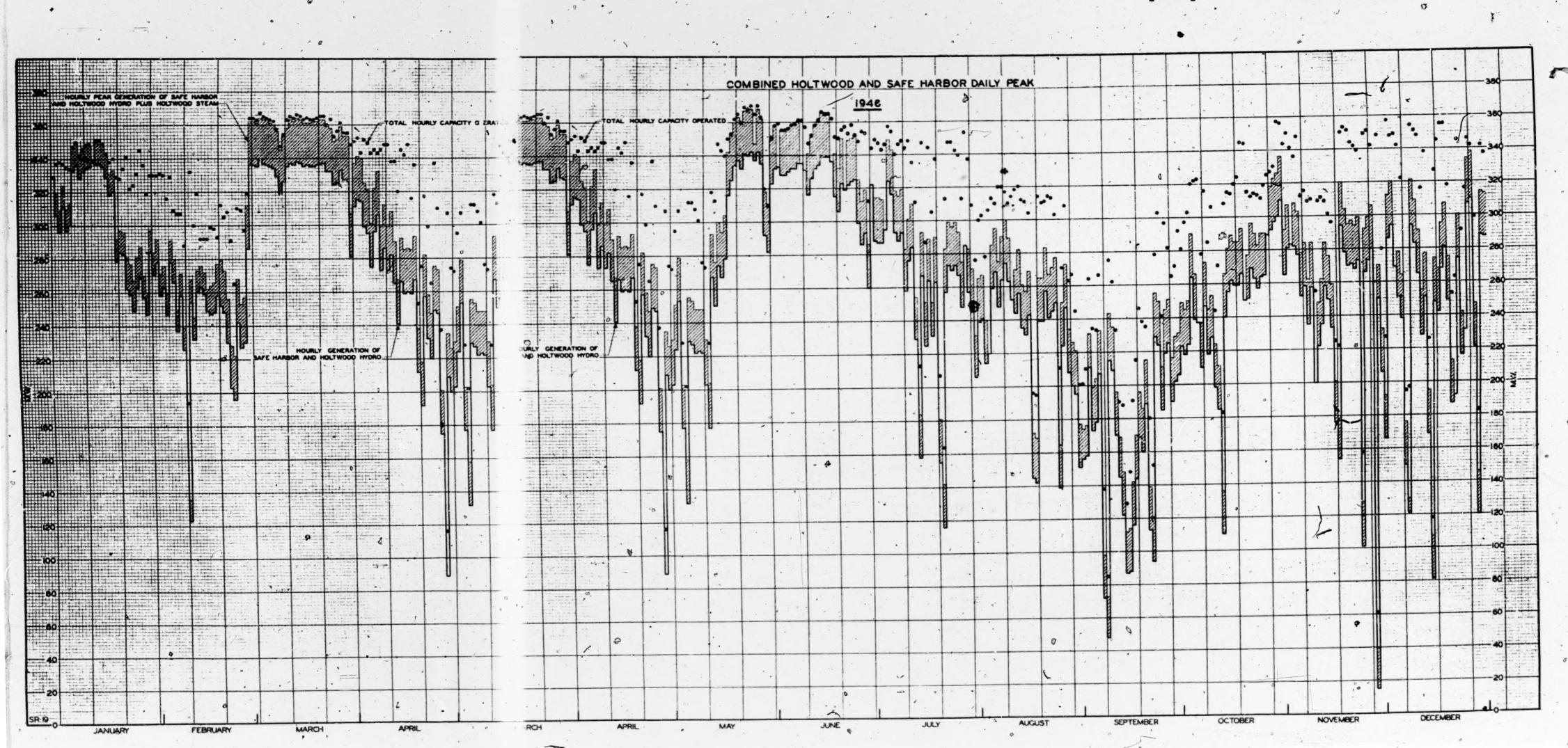
This will acknowledge your note of June 3, 1946, enclosing the data and notes which your company has prepared for inclusion in F.P.C. Form No. 12 for the year 1945, applicable to the combined system report for Pean Water, Safe Harbor, Baltimore, Washington and Bethlehem Steel companies.

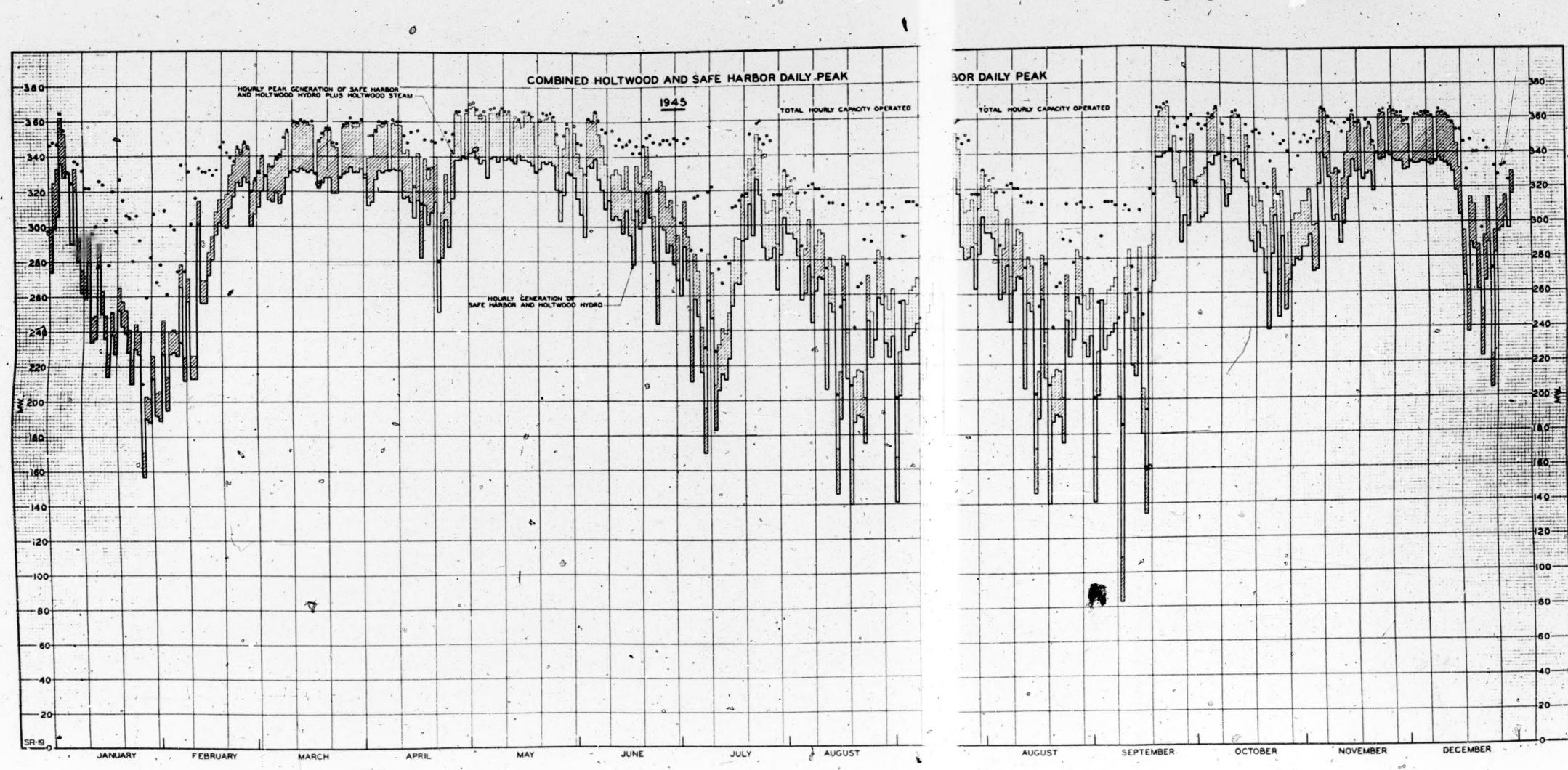
We wish to refer you to our letter of May 28, 1946 and the statements attached thereto, as we believe such statements are the only correct data for submission to the Federal Power Commission as respects the capacities of this Company and of Safe Harbor Company in connection with F.P.C. Form No. 12, Annual Report.

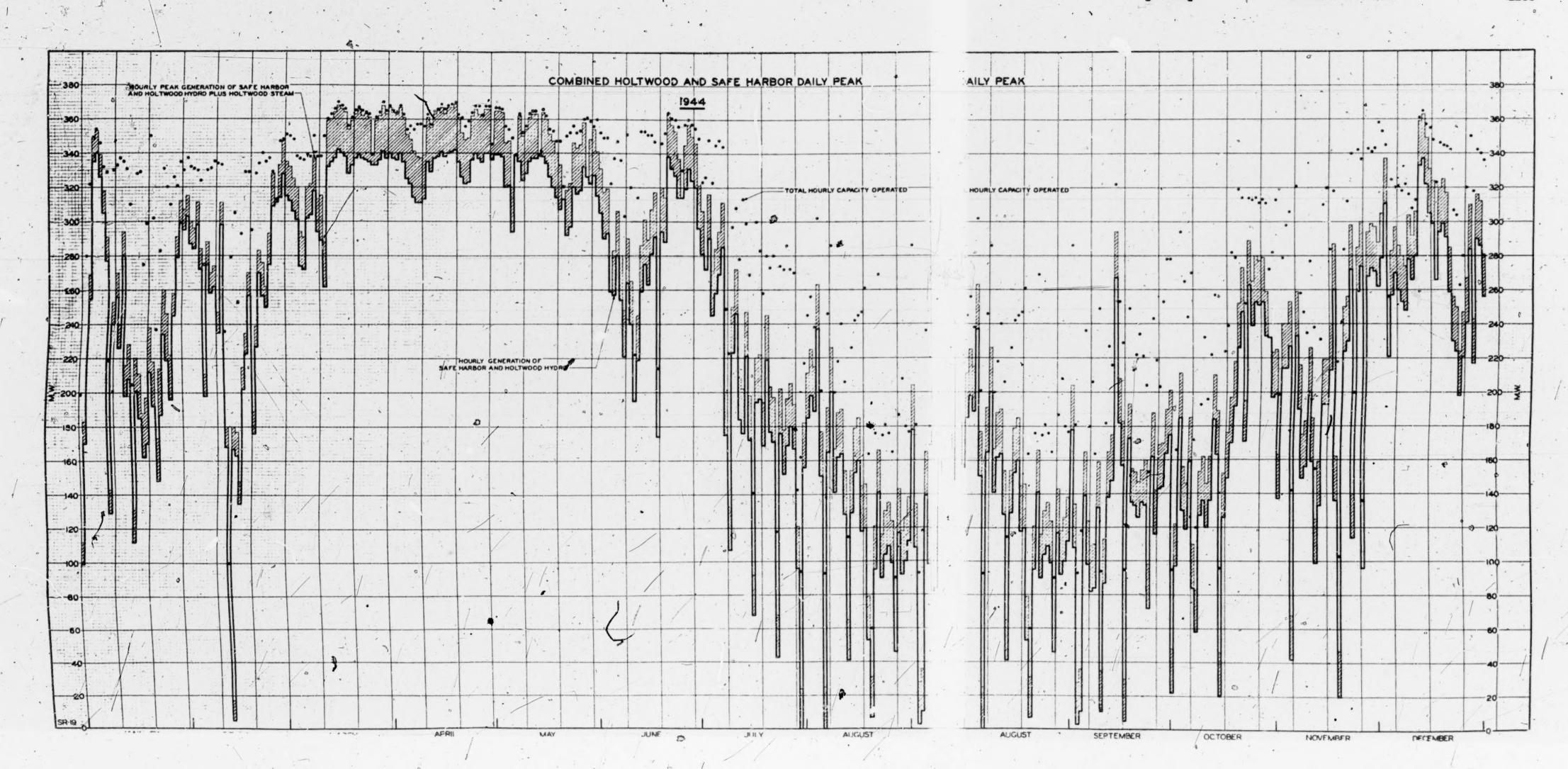
Yours very truly.

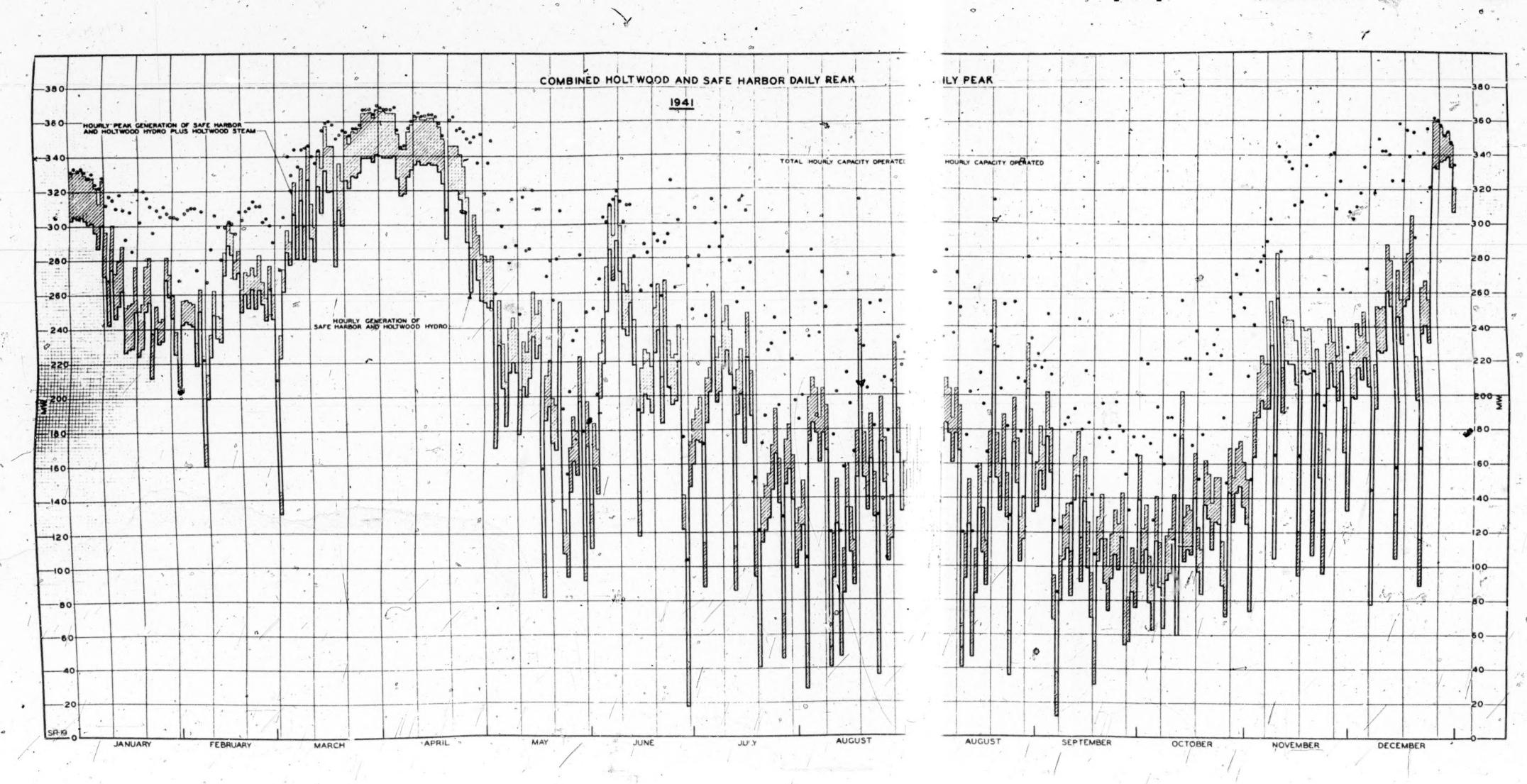
(s) G. W. Spaulding

G. W. Speulding.
Member - Operating Committee









ACTUAL CAPACITY SERVICE FURNISHED AND AVAILABLE TO BALTIMORE FROM PENN WATER AND SAFE HARBOR (All data in Kilowetts)

Capacity Service Actual Delivery to Actual Delivery to Baltimore Adjusted Available to Baltamore At Time of Area 6 Baltimore* at Time of for Interchange System Peak Area 6 System Peak Transactions Date -181,000** 161,000 . 1944 Dec. 11 -6 p.m. 140,000 195,000 205,000 1945 Dec. 5 -6 p.m. 137,000 174,000 Dec. 19 -6 p.m. 130,000 1946 61,000 Capacity Service Available to Saltimore Actual Delivery to 'Actual Delivery to Baltimore* at Time of Baltimore Adjusted at Time of Safe Harbor-Penn Water Safe Harbor-Penn Water for Interchange System Peak System Feak Transactions 194,000 195,000 165,000 1944 Apr. 19-8 a.m. 209,000 149,000 207,000 1945 May 2-5 p.m. 246,000 246,000 236,000 1946 May 25-1 p.m. Capacity Service Actual Delivery to Actual Delivery to Available to Baltimore Baltimore at Time of Baltimore Adjusted At Time of Holtwood Holtwood Power for Interchange Power, Pavelopment Peak Development Peak Transactions . Date 246,000 1944 Apr. 14-1 a.m. 245,000 228,000 235,000 234,000 166,000 1945 - Apr. 28-3 p.m. 189,000 . 189,000 162,000 1946 May 22-5 p.m. Maximum Annual Maximum Capacity Delivery to Baitimore Service Available Adjusted for Inter-Maximum Annual to Delivery to Baltimore Baltimore change Transactions Date 264,000 262,000 1944 Mar. 16-1 a.m. 245,000 251,000 250,000 230,000 1945 Sept.22-4 p.m. 246,000 246,000 # 1946 May 25-5 p.m. 242,000

^{*} Net hourly deliveries at Highlandtown, Westport, Riverside and Takoma.

* A 31,000 kw. unit at Safe Harbor was out for maintenance.

Penn Water's and Safe Harbor's
Firm Power Services
Rendered to Baltimore Company

1946 - Actual and Adjusted

General Statement

This cost of service study consists of 13 schedules, each schedule consisting generally of two parts. The first parts provide certain data in tabular form and the second parts consist of notes regarding the sources of the data and the methods of computation.

Schedules 1 and 2 provide basic data with respect to investments of Penn Water and Safe Harbor, shown separately for general production plant and for the special facilities provided for the various customers. These data are derived from the cost records of the companies, supplemented by the estimated costs of major authorized additions now in progress.

Schedules 3, 4 and 5 provide the basis for the determination of the capacity and energy service components of Penn Water's and Safe Harbor's combined firm power services to Baltimore Company. These data were derived from the operating records of the companies.

Schedules of through 13 show the computations of Penn Water's and Safe Harbor's costs for firm power services to Baltimore Company. These computations are based on the preceding schedules and on additional data obtained from the accounting records of the companies. In addition to the actual costs shown for 1946, a determination has been made of costs typical of conditions in the immediate future. These typical costs are based on actual 1946 costs adjusted for increases in plant investment, increases in operating expenses as estimated for the current year, and the elimination of the tax credit arising from the refunding of Safe Harbor's bonds.

The following summary of results is produced by a combination of costs and returns determined for firm power services rendered to Baltimore Company and shown in Schedules 9a, 10a, and 13a.

Costs of Penn Water's and Safe Harboris Firm Power Services Rendered to Beltimore Company

1946 - Actual and Adjusted

Summary of Results

Total Costs	Incurred in Rendring Baltimore Compan	Firm Power Services t	ò
		/	
	Directly to Baltimore Co	to PRR in Maryland	. 0
Actual	(Sch. 9a and 10a)	(Sch. 1) a)	Total
Penn Water			
Costs (excl. return) Return Total	\$ 2,307,000 1,146,000 3,453,000	\$ 87,000 66,000 \$ 153,000	\$ 2.394.000 2.212,000 \$ 3,606.000
Safe Harbor	6		
Costs (excl. return) Return Total	\$ 473,000 950,000 \$ 1,423,000	\$5,000 60,000 \$95,000	\$ 508,000 1,010,000 \$ 1,518,000
Combined Penn Water and Safe Harbor - 1946 Acti		\$ 248,000	\$ 5,124,000
way to			
Adjusted	-		
Penn Water Costs (excl. return) Return Total	\$ 2,406,000 1,161,000 \$ 3,567,000	\$ 90,000 67,000 \$ 157,000	\$ 2-496 600 228,000 \$ 3.724,000
Safe Harbor Costs (excl. return) Return Total	\$ 867,000 950,000 \$ 1,817,000	\$ 62,000 60,000 \$ 122,000	\$ 929,000 1,010,000 \$ 1,939,000
Combined Penn Water an Safe Harbor, 1946			6 '6 440 000
Adjusted	\$ 5,384,000	\$ 279,000	\$ 5,663,000

1946-Actual and Adjusted

Statement of Penn Water's Investments in General Production Plant and in Special Facilities, and Statement of Bepreciation Reserve

	as of Jan. 1, 1946			as of Dec. 31, 1946			
	in Pa. in Md. (units of 1).			in Md.	Total		
1. General Production Plant	25,940.6 21.3	25,961.9	26,094.0	21.5	26,115.5		
2. Special Facilities for Baltimore Co.	1,345.4 5,243.7	6,589.1	1,353.3	5,249.9	6,603.2		
3. Special Facilities for P.R.	R. 1,842.9 504.5	2,347.2	1,850.0	504.8	2,354.8	一號	
4. Special Facilities for Other	rs 1,447.7 -	1,447.7	1,462.4	-	1,462.4	3	
5. Total Electric Plant (1+2+3+	4) 30,576.6 5,769.3	36,345.9	30,759.7	5,776.2	36,535.9		
6. Excess of Book Cost over Revised Original Cost	•				2,218.1		
7. Plant, Property and Power Development (per books) (5	6)				38,754.0		
8. Depreciation Reserve (per b	ooks)				9,453.9		
9. Depreciation Reserve (per D	Gunn)	6,000.0			6,357.3		

Schedule 1b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule la

All data on Schedule la have been obtained from revised original cost data.

For the purpose of this study the investment as of January 1, 1946 has been adjusted to eliminate the cost of Violet Hill Substation, sold in March 1946.

- 1. General Production Plant includes hydro station, steam station, coal production and preparation plants, service buildings, 25 and 60 cycle step-up substations, tie between circuits 13 and 14 and circuits 15 and 16, Holtwood-Safe Harbor transmission lines, load dispatching facilities, and village.
- 2. Special Facilities for Baltimore include Holtwood-Baltimore, Safe Harbor-Baltimore, Gunpowder-Baltimore, and Ellicott-Washington transmission lines and Highlandtown, Ellicott and Manor Substations.
- 3. Special Facilities for P.R.R. include Conestoga Substation and Safe Harbor-Perryville transmission lines.
- 4. Special Facilities for Others include Holtwood-York, Holtwood-Coatesville, and Holtwood-Lancaster (part of circuits 3 and 18 owned by Penn Water) transmission lines, facilities for Pioneer service, Lehman Farm and Donegal Tap switching stations and Violet Hill Substation.
- Depreciation Reserve of \$6,000,000 as of January 1, 1946 (after adjustment resulting from sale of Violet Hill) is in accordance with testimony of D. Gunn (T-288). The balance in the reserve as of December 31, 1946 is computed as follows:

Depreciation Reserve, Jan. 1, 1946
Add: Depreciation Expense (T-288)

Deduct: Charges to Reserve (excl.

Violet Hill)

\$6,000,000

400,000

Balance - Dec. 31, 1946

\$6,357,314

To reflect expected conditions in the immediate future, the plant investment as of Dec. 31, 1946 has been adjusted by the addition thereto of the estimated cost of major authorized additions now in progress. The estimated costs of these additions and the total adjusted plant investments are as follows:

Schedule 1b (Continued)

	Estimated Cost of Major Additions \$1,000	Plent
Ceneral Production Plant Special Facilities for Baltimore Co. " P.R.R. " Others	380 30 0 340	26,495.5 6,633.2 2,354.8 1,802.4
5. Total Electric Plant	750	37,285.9

The largest addition included above is the 66 kv. Manor Substation; one third of the cost of this substation has been allocated to General Production Plant and two thirds to Special Facilities for Others.

Schedule 2m

Cost of Service Study

1946-Actual and Adjusted

Statement of Safe Harbor's Investments in Genera.
Production Plant and in Special Facilities, and
Statement of Depreciation Reserve

!		Jan. 1, 1946 (units of \$1,000)	Dec. 31, 1946 (units of \$1,000)
1.	General Production Plant	28,254.4	28,306.2
2.	Special Facilities for P.R.R.	1,934.3	1,934.3
3.	Total Electric Plant	30,188.7	30,240.5
4.	Depreciation Reserve	2,142.0	2,399.0

Note: All Safe Harbor property located within the project boundaries in the Commonwealth of Pennsylvania.

Schedule 2b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 2a

All date in Schedule 2a are from S.H. original cost records.

- General Production Plant includes hydro station (excluding certain items listed below as special facilities), step-up transformer facilities, and village.
- 2. Special Facilities for P.R.R. includes tunnel to Conestoga Substation, control facilities for Conestoga Substation (located in S.H. powerhouse) frequency changer including site improvement, excess costs of 25 cycle generators over cost of 60 cycle generators including structures.

To reflect expected conditions in the immediate future, the plant investment as of December 31, 1946 has been adjusted by the addition thereto of the estimated cost of major authorized additions now in progress. The estimated costs of these additions and the total adjusted plant investments are as follows:

		9	Estimated Major Add	ditions		Adjusted Plant	
			(units of	\$1,000)	(1	inits of	\$1,000)
2. Special	l Production Plan l Facilities for Electric Plant		120 . 0 . 120		9 -	8,426.2 1,934.3 0,360.5	



0

1946 Actual

Summary of Interchange Purchases and Sales and of Backfeed Used in Connection with Firm Supply

		\$1,000	million kwh.	mills per kwh.	
I	nterchange (as accounted for in actual billing records)		Ĝ		5
1	. P.W.'s purchases from Pénnsylvania Ties	54.5	12.8	4.27	
2	P.W.'s purchases from Baltimore Co. (see Item 7)	(not accounted	for in "net'	billing)	
3	P.W. & S.H. Hydro & P.W. Steam Energy Sold as Interchange to Pennsylvania Customers	32.8	14.5	2-27	•
. 4	Backfeed and Diverted Energy Sold as Inter- change to Pennsylvania Customers	1,149.4	109.9	6.05	
5	Total Interchange Sales in Pennsylvania (3+4)	1,182,2	204.4		
E	Backfeed ased in connection with firm supply in Pennsylvania (per to show services to Baltimore Co. on a firm power basis)	accounting nace	ssary		
6	6. Purchases from Pennsylvania Customers.	16.9	4.0	4.27	1
-	7.0 Purchases from Baltimore Company	313.3	76.4	4.10	Sche
- 6	Total backfeed or interchange purchases used in connection with firm supply in Pennsylvania (6+7)	330.2	30.4	ents.	dule 3a

Schedule 3b

Cost of Service Study

1946 - 'Actual

Notes to Schedule 3a

Line 1

- to 5 All dollar and energy amounts are from Company's interchange billing records.
- Line 6 Total interchange purchases from Pennsylvania Customers (Line-1) minus interchange sales to Baltimere Company as shown in Item (e) 11 of Firm Power Bill. Energy amounts from analysis of 1946 records. Rate (mills/kwh.) used is same as in line 1.
- Line 7 Dollar amounts are same as Item (d) 5a of Firm Power Bill. Energy amounts and rate (mills/kwh.) ased are based on analysis of 1946 records.

Schedule 4a

Cost of Service Study

1946 Actual

Penn Water's and Safe Harbor's Energy Services
to Baltimore Company

		million kwh.
1	. P.w. and S.H. hydro generation	1,506
. 2	. P.W. steam generation	181
3	. Total backfeed used in connection with firm supply in Pennsylvania	80
. 4	. Total Available energy (1+2+3)	a 1,767
5	. Deduct: Trans. losses and station uses	123
6	. Deduct: P.W. and S.H. hydro and P.W. steam energy sold as interchange	~ <u>~</u>
7	Balance = Firm energy service (4-5-6)	1,630
8	Deduct: Firm energy supplied to Pennsylvania Customers (incl. P.R.R. in Pa.)	749
9	. Balance = Firm energy service rendered to Baltimore Company (78)	881
1	O. Ratio of firm energy service to Baltimore Company to total firm energy (9/7)	54.0%

Schedule 4b

Cost of Service Study

1946 - Actual

Notes to Schedule 4a

Line 1 - 1946 gross generation at Hol wood and Safe Harbor hydro stations.

Line 2 - 1946 gross generation at Holtwood Steam Station.

Line 3 - From Schedule 3a, line 8.

Line 5 - 1946 system transmission losses and Hd.-SH station uses.

Line 6 - From Schedule 3a, line 3.

Line 8 - 1946 supplies to firm customers of Penn Water and of Penn Water and Safe Harbor in Pennsylvania. All peak transfer energy is included with energy supplied to P.R.R. in Pennsylvania.

Line 9 - The amount shown includes energy service rendered to P.R.R. in Maryland.

Schedule

Cost of Service Study

1946 Actual

Penn dater's and Safe Harbor's Capacity Services to Baltimore Company

(All Capacities in Megawatts and on 1 Hour Integrated Basis)

Lo	Hydro Capacity (P.W. + S.H.)	295
2.	Capacity of Holtwood Steam Plant	28
	Deduct: Station Uses & Transmission Losses	18
40	Capacity Services at time of Combined System (Area 6 plus Pennsylvania Customers)	
	Peak (1+2-3)	305
5.	Total of Pennsylvania Customers (incl. P.R.R. in Ba.) Loads at time of	*
0	Combined System Peak	
6	P.W. and S.H. Share of Combined System Reserve Requirement (Reserve	
0	Applicable to Assured Capacity Obligations in Pennsylvania)	
7:	Total Capacity Obligation to Pennsylvania Customers	1
	(incl. POR.R. in Pa.) at time of Combined System Peak (5+6)	154
		•
8.	Capacity Services Available to Baltimore Company at time of Combined System Peak (4-7)	151
	Total of Pennsylvania Customers' (incl. P.R.R. in Pa.) Non-coincident Peak Loads . 155	100
9:	Total of Pennsylvania Customers (Incl. 1. K. K. In 14) House to Carlotte Control Pennsylvania Customers (Reserve	
10.	P.W. and S.H. Share of Combined System Reserve Requirement (Reserve	
	ADDITIONED TO ADDITION OF THE CONTRACTOR OF THE	
11.	Total Capacity Services to Pennsylvania Customers (incl. P.R.R. in Pa.) (9+10)	175 326
		326
12.	*Total (8+11)	=
	The same of the Relation Company to Total 18/12	46.36
13.	Ratio of Capacity Services to Baltimore Company to Total (8/12)	===
		1 71 .

Schedule 5b

Cost of Service Study

1946 - Actual

Notes to Schedule 58

- Line 1 Determination of Holtwood and Safe Harbor hydro capacity service available and used in connection with the combined system loads (Area 6 plus Pennsylvania Customers).
- Line 2 Winter rating of the peak capacity available from Holtwood Steam Station.
- Line 3 Experienced losses with total P.W. and S.H. generation as shown in Lines 1 and 2.
- Line 5 From hourly load data for 1946.
- Line 6 The Pennsylvania Customers' loads (incl. P.R.R. in Pa. but excl.

 M.E. Co.) are included in the combined system load. System capacity must be planned to cover this combined load with an adequate margin of reserve. P.W. and S.H. are responsible for the provision from their own capacity of such part of the total system reserve capacity. The reserve capacity responsibility here assigned to P.W. and S.H., to be provided from their capacity, is 15% of the sum of the non-coincident peaks of the Pennsylvania Customers (incl. P.R.R. in Pa. but excl. M.E. Co.).
- Line 7 Sum of Pennsylvania Customers' loads at time of combined system peak and reserve provided for these loads.
- Line 8 Capacity services available to Baltimore Company at time of combined system peak (which coincides with Baltimore Company's peak).
- Line 9 From hourly load data for 1946.
- Line 10 See Line 6

Schedule 6a

Cost of Service Study

1946 Actual and Adjusted

Statement of Penn Water's and Safe Herbor's Electric Plant, Working Capital, and Depreciation Reserve

			P.w. &	P. Co. 71,000)	S.H.W.P.	
	Total Electric Plant (from Schedules 1 and 2)		Actual	Adjusted	actual	Adjusted
2.	At beginning of year At end of year Average of 1 and 2*	· .	36,346 36,536 36,441	37,286	30,189 30,240 30,215	30,360
	Working Capital (from Ex. 23 for P.W. and from testimony in IT 5914 for SH)					
5.	Materials and Supplies Component Cash Component Total (4+5).		489 483 977	489 488 977	143 77 220	77. 220
	Depreciation Reserve (from Schedules 1 and 2)		. 3			
7. 8. 9.	At end of year Average of 7 and 8		6,000 6,357 6,178	6,357	2,142 2,399 2,270	2,399

^{*} The amounts in "Adjusted" columns, line 3, are for 12-31-46 plus additions.

Schedule 7a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Penn Water's Investment, Working Capital, Depreciation Reserve, Return and Income Taxes to Baltimere Company

0	ng ng ng		Actua		Adjust	ed
			factor	\$1,000	factor.	\$1,000
	Ir	evestment in General Production Plant				
	(from Schedule 1)				ni . 2
		At beginning of year		25, 962		
	2.	At end of year		. 26, 116	. 3	61 106
	3.	Average of 1 and 2		26,039		26,496
	"Al	location to Baltimore Company of Line 3				1 201
	4.	On basis of capacity service	5x.463		.5x.463	6,134
•	5.	On basis of energy service	.5x.540	7,031	5x.540	7.154
	In	Daltimore Co. (from Schedule 1)				
		'At beginning of year		6,589		
9		At end of year		6,603		1 100
		Average of 6 and 7		6,596	0	6,633
	9.	Total Investment Allocated to Baltimore Company (4-5-8)		19,655		19,921
	10.	Ratio of Line 9 to Total Electric Plant from Schedule 6a	.539	•	•534	
6			,		•	3
	W	orking Capital Allocated to Baltimore				
	. (Company		041	E21.	261
	11.	Materials and Supplies (on basis of investment)	.539	264	•534	
	12.	Cash (on basis of operating expenses)	.55%	272	.557	272
		9	/			rs.
	13.	Undepreciated Rate Base Allocated to		00 303		20 /5/
		Baltimore Company (9+11+12)		20,191	•	20,454
				,		
	14:	Depreciation Reserve Allocated to Baltimore Company	.539	3,330	•534	3,395
		- in in in-	6.5%	1,312	6.5%	1,330
	15.	Return on Allocated Rate Base (Rate x 13)	3.0%	99	3.0%	102
	16.	Credit on Allocated Depr. Reserve (Rate x 1/1)	2.0%	1,213	2.01	1,228
	17.	Allocated Operating Income (15 16)		1,41)		-
		to a Dada I Tanana Mari		432		.440
	18.	. Allocated Federal Income Tax		20	6	21
	19.	Allocated Pennsylvania Income Tax		452		461
	20.	. Total Income Taxes			* * * * *	

Schedule 7b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 7a

- Lines 4 and 5 The investment in general production plant, shown in line 3, is allocated one-half to capacity service and one-half to energy service. Of the one-half which is allocated to capacity service, the percentage shown in line 13 of Schedule 5a is allocated to Baltimore Company. Of the one-half which is allocated to energy service, the percentage shown in line 10 of Schedule 4a is allocated to Baltimore Company.
- Line 10 The total investment allocated to Baltimore Company shown in Line 9, has been divided by the total electric plant, shown in Line 3 of Schedule 6a. The ratio shown here is the portion of Penn Water's total investment in electric plant which is allocated to service to Baltimore Company.
- Line 11 The materials and supplies component of working capital, shown in Line 4 of Schedule 6a, has been allocated to Baltimore Company in proportion to investment.
- Line 12 The cash component of working capital, shown in Line 5 of Schedule 6a, has been allocated to Baltimore Company in proportion to operating expenses.
- Line 14 The depreciation reserve, shown in Line 9 of Schedule 6a, has been allocated to Baltimore Company in proportion to investment.
- Line 15 A return of 6-1/2% has been computed on the undepreciated rate base allocated to Baltimore Company.
- Line 16 A credit at 3% has been allowed on the allocated portion of the depreciation reserve.
- Lines 18, 19 and 20 Federal and State Income Taxes have been computed by the tentative tax method used in Penn Water's usual tax computation. In this computation Income deductions have been allocated in proportion to total investment and working capital. The Pennsylvania State Income Tax has been allocated in the ratio of the investment in Pennsylvania, included in Line 9, to the total investment in Pennsylvania in Line 5 of Schedule 1a.

1966 Actual and Adjusted

Allocation of Safe Harbor's Investment, Working Capital, Depreciation Reserve, Return and Income Taxes to Baltimore Company

		Actual	Adjusted		
		facto. \$1,000	factor	\$1,000	
	Investment in General Production Plant (from Schedule 2)				
	At beginning of year . 3	28 254 28 306			
	Average of 1 and 2	28,280		28,426	
	Allocation to Balt more Company of line 3		•		
. 5.	On basis of energy service	5x-463 6,547 5x,540 7,636	5x,463	7,675	
6.	Total Investment Allocated to Baltimore Company (4+5)	14, 183		14,256	
7.	Ratio of line 6 to Total Elector Plan	14,00		14,200	
	from Schedule ha	69	1 5469	No.	
8.	Working Capital	103	•	103	
9.	Depremation Reserve Aliccated to Bala more Company (at beginning of year)	469 1.005	.469	1,125	
20	W			, ====	
11.	Return on Allocated Rate Base (Rate x 6) Deduct: Interest Comp. of Depr. Exp. (Ratex9)	7.0% 993 4.25% 43	7.0% 4.25%	998	
	Allocated Operating Jacome (10)	950		950	
. 14.	Allocated Federal Income Tax Allocated Pa, State Income Tax	0	•	320	
-	Total Toucone Taxes	0		338	

Schedule 8b

Cost of Service Study

1946 - Actual and Adjusted.

Notes to Schedule 8a

- Lines 4 and 5 The investment in general production plant, shown in Line 3, is allocated one-half to capacity service and one-half to energy service. Of the one-half which is allocated to capacity service, the percentage shown in Line 13 of Schedule 5a is allocated to Baltimore Company: Of the one-half which is allocated to energy service, the percentage shown in Line 10 of Schedule 4a is allocated to Baltimore Company.
- Line 7 The total investment allocated to Baltimore Company, shown in Line 6, has been divided by the total electric plant, shown in Line 3 of Schedule 6a. The ratio shown here is the portion of Safe Harbor's total investment in electric plant which is allocated to service to Baltimore Company.
- Line 9 Depreciation reserve at the beginning of the year, shown in Line 5 of Schedule 6a, has been allocated to Baltimore Company in proportion to total investment.
- Line 10 Return has been computed at 7% on the investment allocated to Baltimore Company.
- Line 11 Interest component of depreciation expense has been computed at 4-1/4% on the allocated portion c? the depreciation reserve.
- Lines 13, 14 and 15 Federal and State Income Taxes have been computed by the tentative tax method used in Safe Harbor's usual tax computation. In this computation income deductions have been allocated in proportion to investment. As a result of the refunding of Safe Harbor's bonds in 1946, the actual taxes accrued were zero. In the "Adjusted" column the taxes are based on income doductions applicable in the first year after the issuance of Safe Harbor's new bonds and notes.

Schedule 9a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Penn Water's Expenses to Baltimore Company and
Determination of Total Cost to Penn Water for
Service to Baltimore Company

		Act	ual	Ad jus	ted
	0	Totals to be Allocated	Allocation to Baltimore Co.	Totals to be Allocated	Allocation to Baltimore Co.
*	Expenses	\$1,000	Ratio \$1,000	\$1,000	Ratio \$1,000
1.	Operation and Maint nance	1,495	:567 847	1,686	.567 956
2.	Net. Interchange	297	.540 160	297	-540 160
3.	General Expenses	906	.544 493	878	-540 475
4.	General Taxes (excl. of Pa. Income Tax)	251	•553 139	253	.553 140
2.	Federal Income Tax	•	- 132	· · · ·	- 440
0.	Pennsylvania Income Tax	-	- 20		- 21
7.	Depreciation	400	•539	400	.534 214
8.	Total Expenses		2,307		2,406
	Return		Made factor commission and a second		
9.	Allocated Operating Income (from Schedule 7a)		- 1,213		1,228
10.	Credit for Revenues other than from Firm Power Services (Miscellaneous Electric		.,,		, , , , , , , , , , , , , , , , , , , ,
	Re vonues)	134	.501 (67)	134	.501 (67)
11.	Total Expenses and Return Allocated				
-	to Baltimore		3,453		3,567
				7-4	, 1
		, ,			

Schedule 9b

Cost of Service Study

1946 - Actual and Adjusted.

Notes to Schodule 9a

- Line 1 The ratio of the total operation and maintenance expense which has been allocated to Baltimore Company is a composite figure. From the accounting records of the Company, an allocation of operation and maintenance expense was made among the general production plant, fuel cost for Holtwood Steam Station, and special facilities provided for Baltimore Company, P.R.R. and others. The expense allocated to general production plant was in turn allocated 50% to capacity and 50% to energy; these two portions were then allocated to Baltimore Company in proportion to capacity and energy services. Fuel cost for Holtwood Steam Station was allocated to Baltimore Company in proportion to energy service. Expense allocated to special facilities for Baltimore Company was directly included in the allocated total. Part of the load dispatching expense accumulated on the books of Penn Water is charged to Safe Harbor; another credit arises from village revenue. Both credits were considered as applying to general production plant and were allocated through capacity and energy services.
- Line 2 Net interchange is the excess of the estimated cost of backfeed energy used in connection with firm supply over the sales as interchange of Penn Nater and Safe Harbor excess hydro and Holtwood steam energy.

 The dollar amount can be derived, on this basis, as the difference between Line 8 and Line 3 of Schedule 3a.

The amount of net interchange expense can also be derived directly from Penn Water's firm power bill to Baltimore Company. The sum of Items (d) 1,2,3 and 5, all representing interchange purchases, minus the sum of Items (e) 5,6,7 and 11, all representing interchange sales, is equal to the dollar amount of net interchange.

Net interchange has been allocated to Baltimore Company in the ratios of energy service as shown on Schedule 4a.

- Line 3 General expense has been allocated to Baltimore Company on the basis of investment allocated to Baltimore Company (to the extent of about 75% of the expense) and on the basis of operating expense allocated to Baltimore Company (for the remaining 25% of the expense).
- Line 4 The general taxes here allocated are as shown in the Company records, after deducting therefrom the Pennsylvania income tax, which tax has been considered in relation to return.

General taxes were considered individually. Capital Stock and Property Taxes for Penrsylvania and Maryland were allocated to Bultimore Company in proportion to its allocated portion of investment in each state. Federal taxes other than income were allocated to Balti-

Schedule 9b (Continued)

more Company by the ratio determined by the allocation of operation and maintenance expense before the credits mentioned in notes for Line 1 above. The Pennsylvania Gross Receipts Tax and Pennsylvania FUC assessment have not been considered allocable to Baltimore Company.

- Lines 5 and 6 Income taxes allocated to Baltimore Company have been copied from Schedule 7a. No total or allocation ratio has been shown since these taxes are unrelated to the total income taxes paid by Penn Water.
- Line 7 Depreciation expense allocated is that shown by the testimony of D. Gunn (T.288).

The allocation ratio is the ratio of investment allocated to service to Baltimore Company as found in Schedule 7a.

Line 10 -It is not possible to allocate against Miscellaneous Electric Revenue any investments or expenses. Consequently, an allocated portion of these revenues must be considered as a credit against the total expenses and return allocated to Baltimore Company.

These revenues have been considered as applying to general production plant and have been allocated to Baltimore Company through energy and capacity services.

The "Adjusted Totals to be Allocated" shown in lines 1, 3 and 4 are based on the Operating Committee's estimated Holtwood Company bill to Baltimore Company for 1947.

1.50

1946 Actual and Adjusted

Allocation of Safe Harbor's Expenses to Baltimore Company and Determination of Total Cost to Safe Harbor for Service to Baltimore Company

	4		Ad jus		
. >		Actual Motals to be Allboation to Allocated Baltimore Co.	Totals to be allocated	Allocation to Baltimore Co.	
~	Expenses	\$1,000 Ratio \$1,000	\$1,000	Ratio \$1,000	
1'.	Operation and Maintenance	436 .461 201 226 .465 105	513 262	.461 237 .465 122	,
2.	General Expenses		94	425 40	
3.	General Taxes (exc) Pa.Income Tax)	99 425 42	74	320	
4	Federal Income Tax	0		18	
5.	Pennsylvania Income Tax	266469 125	278	.469 130	
00	Depreciation (annuity plus interest)	473		867	
70	Total Expenses	4	1		1.5
	Return				
-		The second second			
8.	Allocated Operating Income (from Schedule 8a)	950		950	1
6"	Schedule oal	6			ø
9.	. Total Expenses and Return Allocated to Baltimore Company	1,423		1,817	
	1		-/-		1
			1 2 2	: /	
		1.		· In	

Schedule 10b

Cost of Service Study 1746 - Actual and Adjusted

Notes to Schedule 10a

- Line 1 The ratio of the total operation and maintenance which has been allocated to Baltimore Company is a composite figure. From the accounting records of the company ellocation of operation and maintenance expense was made between the general production plant and special facilities provided for P.R.R. The expense allocated to general production plant was in turn allocated 50% in capacity and 50% to energy; these two portions were then allocated to Baltimore Company in proportion to capacity and energy services. Part of the load dispatching expense accumulated on the books of Penn Water is charged to Safe Harbor and the allocated portion of this expense was added in the total expense allocated to Baltimore Company. A credit arises from village revenue, which was considered applicable to general production plant and was allocated to Baltimore Company through capacity and energy services.
- Line 2 General expense has been allocated to Baltimore Company in part on the basis of investment allocated to Baltimore and in part on the basis of operating expense.
- Line 3 The general taxes here allocated areas shown in Company records after deducting therefrom the Pennsylvania income tax, which tax has been considered to relation to return.

The ratio allocated to Baltimore Company is a composite figure. Regulatory Commission charges were allocated to general production plant and in turn allocated through capacity and energy service to Baltimore Company. Other general taxes are related to investment or to operation and maintenance expense and were allocated to Baltimore Company in the same ratios that investment or operation and maintenance respectively were allocated to Baltimore Company. The gross receipts tax was not considered allocable to Baltimore Company.

- Lines 4 and 5 Income taxes allocated to Beltimore Company have been copied from Schedule 8a.
- Line 6 Depreciation expense allocated is the sum of the annuity and interest components. The allocation ratio is the ratio of investment allocated to service to Baltimore Company as found in Schedule Sa.
- Line 8 Because the interest component of depreciation expense is included in Line 6, it has been deducted in the computation of allocated operating income

The "Adjusted Totals to be Allocated" shown in lines 1, 2 and 3 are based on the Operating Committee's estimated Safe Harbor bill to Holtwood and Baltimore Companies for 1947. The adjusted amount in line 6 includes 4.25% interest on the depreciation reserve balance as of 12-31-46.

1946. Actual and Adjusted

Allocation to P.R.R. of Penn Water's Investment, Working Capital, Return and Expenses for Special Facilities Provided for Service to P.R.R.

0			Ac	tual		Adjus	sted			39	
9			Totals to be Allocated	P.,R		Totals to be Allocated	Allocat P.R Ratio		a		
	. 1	Investment in Special Facilities for P.R.R. and	\$1,000	Ratio	\$1,000	- \$1,000	Racio	41,000	,	- 41	
	1. 2. 3.	Allocated Working Capital Special Facilities at beginning of year (Schedule 1) Special Facilities at and of year (Schedule 1) Average of 1 and 2	0		2,347 2,355 2,351	1		2,355			
	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		.065	6	1	.063				
	5.	Ratio of Line 3 to Total Electric Plant Materials and Supplies (on basis of investment) Cash Working Capital (on basis of operating expenses)	489 -	.065	32 19		.063	31		াৰ	
	0.	o		,	-			14		-	
	7.	Undepreciated Rate Base Allocated to Special Facilities for P.R.R. (3+5+6)		0	2,402		3	2,405		Ezhibit	i
•	d	Depreciation Reserve Allocated to			,					Z	
	8.	Special rapilities for P.R.R.	. 6,178	.065	401	6,357	.063	i = 401		.0	
	0	Return Poto Baco (Rate v 7)		6.5%	156		6.5%	156	-	. 37	
	10.	Return on allocated Rates Base (Rate x 7) Credit on allocated Depr. Reserve (Rate x 8)		3.0%	12		3.0%	12	1.	00	
		Allocated Operating Income (9-10)			144		•	144	4.		
		Expenses		D	1	1,686	.029	. 49			
4	12.	Operation and Maintenance	906	029	43 52	878	.055	48	4		
	13-	General Expenses .	251	060	15	253.	.060	15			
	14	General Taxes (excl. Pa. Income Tax)	274		51			52		o.	
	15.	Federal Income Tax Fennsylvania Income Tax			3			3	1		
	17	Depreciation	400	.065	26	400	。063	25 0	. 4		
		Total Expenses			190.			192	1		
	19.	Total Return and Expenses Allocated to Special Facilities Provided for Service to P.R.R. (11+18)			334			336		4215	M
						100			a mil	1	

Schedule 11b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule lla

- Line 4 The total investment in special facilities provided for service to P.R.R., shown in Line 3, has been divided by the total electric plant, shown in Line 3 of Schedule 6a.
- Lines 5 and 6 Working Capital (from Ex.23) has been allocated to special facilities for service to P.R.R. in the manner explained in notes to Lines 11 and 12, Schedule 7b.
- Line 11 -Operating Income allocated to special facilities for service to P.R.R. has been determined in the manner explained in notes to Lines 14 to 16, Schedule 7b.
- Line 12 -The only Operation and Maintenance Expense allocated to special facilities for service to P.R.R. results from a direct allocation from accounting records. The Tatio determined from this direct allocation of 1946 expense has been applied to the adjusted expenses.
- Line 13 General Expense has been allocated to special facilities for service to P.R.R. in the manner explained in notes to Line 3, Schedule 9b.
- Line 14 -The General Taxes here allocated are as shown in Company records after deducting therefrom the Pennsylvania Income Tax. The ratio allocated to special facilities for service to the P.R.R. is a composite figure. Property and Cap: tal Stock Taxes for Pennsylvania and Maryland were allocated in proportion to allocated investment in each state. Federal taxes other than income were allocated in proportion to Operation and Maintenance Expense. The Pennsylvania PUC assessment was allocated in proportion to the ratio of P.R.K. revenue to total revenues received from Pennsylvania business.
- Lines 15 and 16 Income taxes allocated to special facilities for services to P.R.R. have been computed on the allocated return shown in Line 11 The Pennsylvania tax has in turn been proportioned to investment in Pennsylvania. No totals or allocation ratios have been shown, since these taxes are unrelated to the total income taxes paid by Penn Water.
 - Line 17 -Depreciation Expense allocated is the amount proposed in the testimony of D. Gunn (T.288). The allocation ratio is that shown in Line 4.

1946 actual and adjusted

Allocation to P.R.R. of Safe Harbor's Investment, Return and Expenses for Special Facilities Provided for Service to P.R.R.

	Acti	ial	i adj	usted
	Totals to be Allocated	Allocation to P. R. R.	Totals to be Allocated	Allocation to P. R. R.
	\$1,000	Ratio \$1,000	31,000	Ratio \$1,000
nvestment in Special Facilities for P.R.R.		1		
. Special Facilities at beginning of year (Schedule 2)		1.92/		
Special Facilities at end of year (Schedule 2)		1,934		
. Average of 1 and 2		1,934		1,934
		. , ===		
. Ratio of Line 3 to Total Blectric Flant	, ,	.064.		.064 .
			*	
Expenses	13 1106	000 000	513	.085 44
. Operation and waintenance	436	.085 9 37 .075 17	262	.085 44
. General Expenses	99	.051 5	94	.051
Federal Income Tax	"	- 0		- 41
. Pennsylvania Income Tax		0		
O. Depreciation	266	.064 " 17	278	.064
I. Total Expenses	*	76		13
Return				300
2. Operating Income		129	- 6	- 129
a many Barrer at Barrer 1811 and the Constal		7 1 1 1 1		
3. Total Expenses and Return Allocated to Special Facilities Provided for Service to P.R.R.		205		262
racitives rrovided for service to				
		34		180
				6
7 20		1	,	0

[24392]

Schedule 12b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 12a.

- Line 4 The total investment in special facilities for service to P.R.R. shown in Line 3 has been divided by the total electric plant, shown in Line 3 of Schedule 6a.
- Line 5 The only Operation and Maintenance Expense allocated to special facilities for service to P.R.R. results from a direct allocation from accounting records. The ratio determined from this direct allocation of 1946 expense has been applied to the adjusted expenses.
- Line 6 General Expense has been allocated to special facilities for service to P.R.R. in the manner explained in note for Line 2, Schedule 10b.
- Line 7 the general taxes here allocated are as shown in Company records after deducting therefrom the Pennsylvania Income Tax. The ratio allocated to special facilities for service to the P.R.R. is a composite figure. Capital Stock and Property taxes were allocated on the basis of investment. Federal taxes other than income are related to Operation and Maintenance Expense and were allocated in the same ratios that Operation and Maintenance were allocated. Regulatory commission charges and Gross Receipts tax were not considered allocable to P.R.R.
 - Lines 8 and 9 Income taxes allocated to special facilities for services to P.R.R. have been determined by reference to Schedule 8a. Taxes there shown in Lines 13 and 14 were reduced in the ratio of the respective investments in special facilities for service to P.R.R. and in plant allocated to Baltimore Company (as shown in Line 6 of Schedule 8a).
 - Line 10 -Depreciation expense allocated is the sum of the interest and annuity components. The allocation ratio is that shown in Line 4.
- Line 12 -Operating income allocated to special facilities for service to P.R.R. has been determined by reference to Line 12 of Schedule 8a. The amount there shown was reduced in the ratio of the respective investments in special facilities for service to the P.R.R. and in plant allocated to Baltimore Company (as shown in Line 6 of Schedule 8a).

1946 Actual and adjusted.

Determination of Baltimore Company's Share of Penn Water's and Safe Harbor's Total Gosts for Special Facilities Provided for Service to P.R.R.

- 6		-)	Proportional tem 13 Among Ite	ens 1,2,4, an	of d 5
		Actual \$1000	Adjusted	Actual 31000	Adjusted 31000	
enn	Water's Costs for Special Facilities ded for Service to P.R.R. (from Schedule 11a)	(1)	(2)	(3)	14)	
	xpenses	190	192	87	90	
	eturn Ootal	334	336	1 53	157	1
efe rovi	Harbor's Costs for Special Facilities ded for Service to P.R.R. (from Schedule 12a)				62	
. R	Expenses of the turn of turn of the turn of turn of the turn of tu	76 129 205	133 A 129 262	35 60 95	122	
	Potal Penn Water and Safe Harbor Cost of Special Facilities for P.R.R. (3+6)	539	598	248	279	
	Cost to Beltimore Company for Benning Frequency Changer	78	<u>_78</u>			1
. 7	Total Cost of Special Facilities for P.D.R. (7+8) .	617	676			
0. F	Ratio of Energy Delivered to P.R.R. in Maryland to Total Energy Delivered to P.R.R.	•528	•528	7.		
1. 4	Allocated Cost of Special Facilities Provided for P.R.R. Service in Maryland (9x10)	326	357		2	
	Deduct: Cost of Special Facilities Paid Directly by Baltimore Company (Line 8)	78	<u>78</u>			
	Balance = Baltimore Company's Share of Penn Water's and Safe Harbor's Total Costs for Special Facilities Provided for Service to P.R.R.	248	279		8	

Schedule 13b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 13a

- Lines 1 to 6 The data in columns 1 and 2 have been taken directly from Schedules 11a and 12a. The data in the columns 3 and 4 are discussed later in these notes.
- Line 8 Baltimore Company pays to Potomec Electric Power Company specified charges in connection with the use of the Benning Frequency Changer for supply to P.R.R.
- Line 10 The ratio of energy delivered to P.R.R. in Maryland to total energy delivered to P.R.R. is based on the division of energy in 1946. In accordance with the memorandum received as Exhibit 11, Baltimore Company's share of the revenues received from P.R.R. is based on this same ratio.
- Line 13 -Of the total cost of special facilities provided for service to P.R.R. in Maryland, Line 11, Beltimore Company pays directly to Potomac Electric Power Company the amount shown in Line 12. The balance is Penn Water's and Safe Harbor's cost for special facilities for service to P.R.R. in Maryland, or Baltimore Company's share of Penn Water's and Safe Harbor's total costs for special facilities provided for service to P.R.R. These costs must be added to Penn Water's and Safe Harbor's other costs for services to Baltimore Company.
- Lines 1 to 6 In columns 3 and 4, the total shown in Line 13 has been broken down proportionately among the expenses and returns of the two companies.